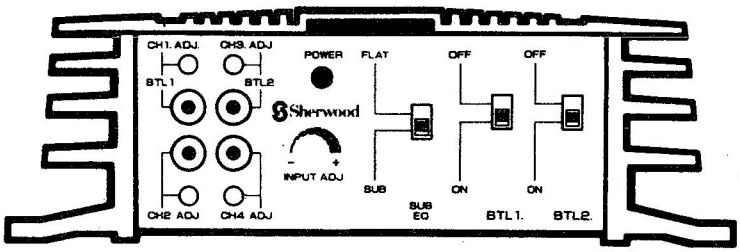
SERVICE MANUAL

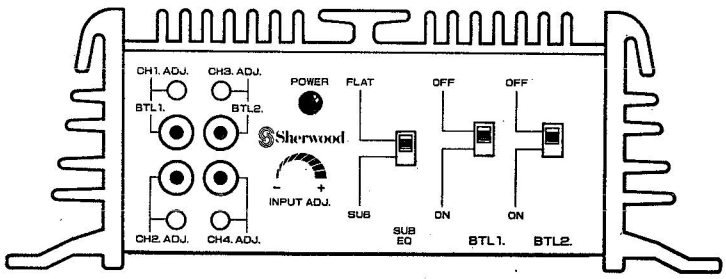
SCP-802BP/ GA-1071BP

CAR STEREO AMPLIFIER



SCP-1002BP/ GA-1072BP

CAR STEREO AMPLIFIER



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Sherwood

Specifications

1. SCP-802BP/GA-1071BP Only Item

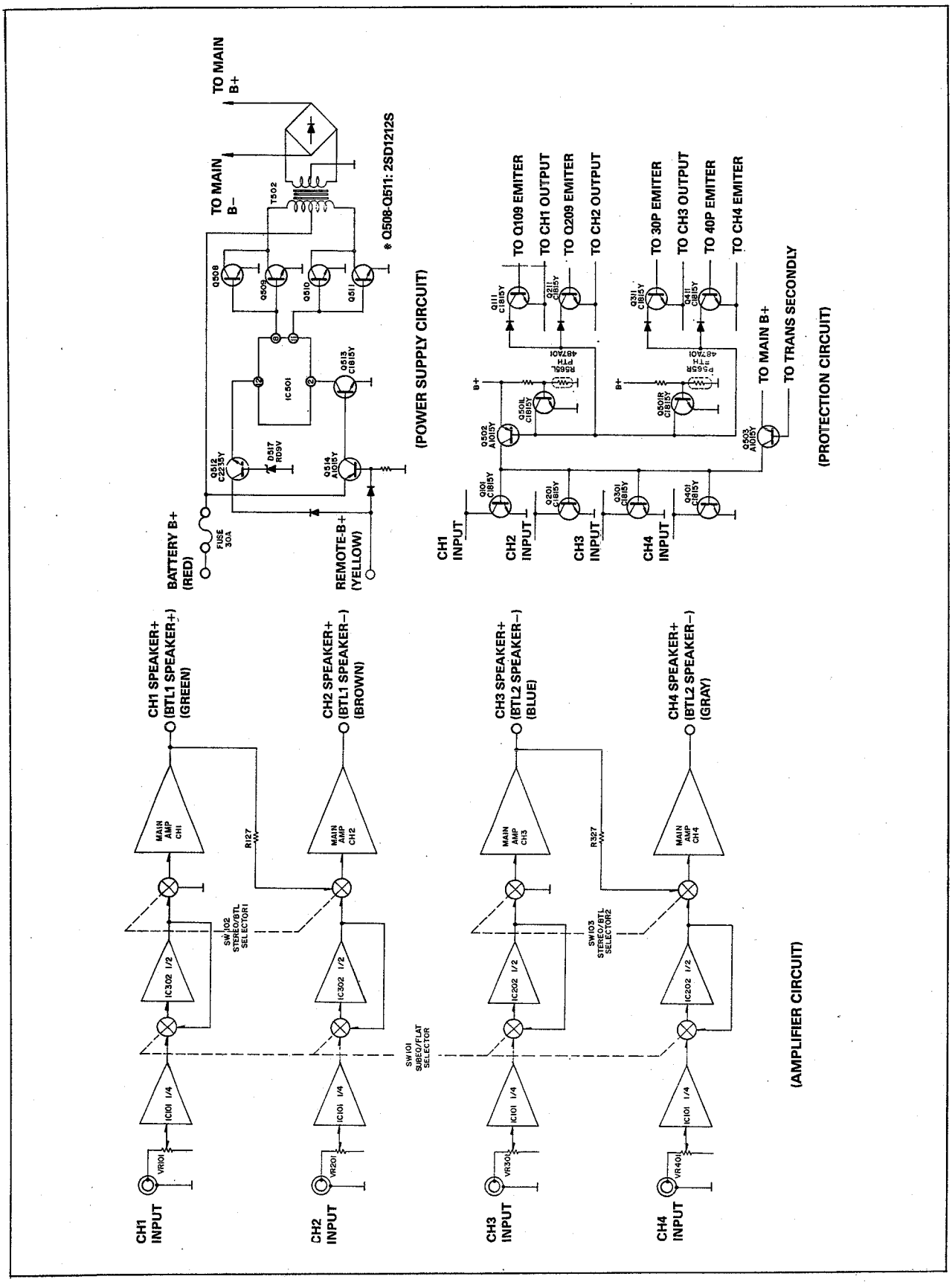
Output Power (Watts)/CH into 4ohms	
@ 50Hz~20KHz, 0.5% THD	35W
@ 1KHz, 10% THD	45W
Output Power/BTL CH into 4ohms	
@ 1KHz, 0.5% THD	70W
Frequency Response, −3dB	16Hz~27KHz
SUB Bass EQ. Response @ 60Hz	+6 dB
@ 40Hz	0 dB
Signal to Noise Ratio (IHF A), WTD/UNWTD	90/85dB
Input Sensitivity/10k ohms	
@ HIGH	250mV
@ LOW	1 V
Operating Voltage	DC11V~16V
Speaker Impedance	4 ohms
Dimension (W×H×D)	304×74×227mm
Net Weight	3.55 Kg
Fuse, Main	30A

2. SCP1002BP/GA-1072BP Only Item

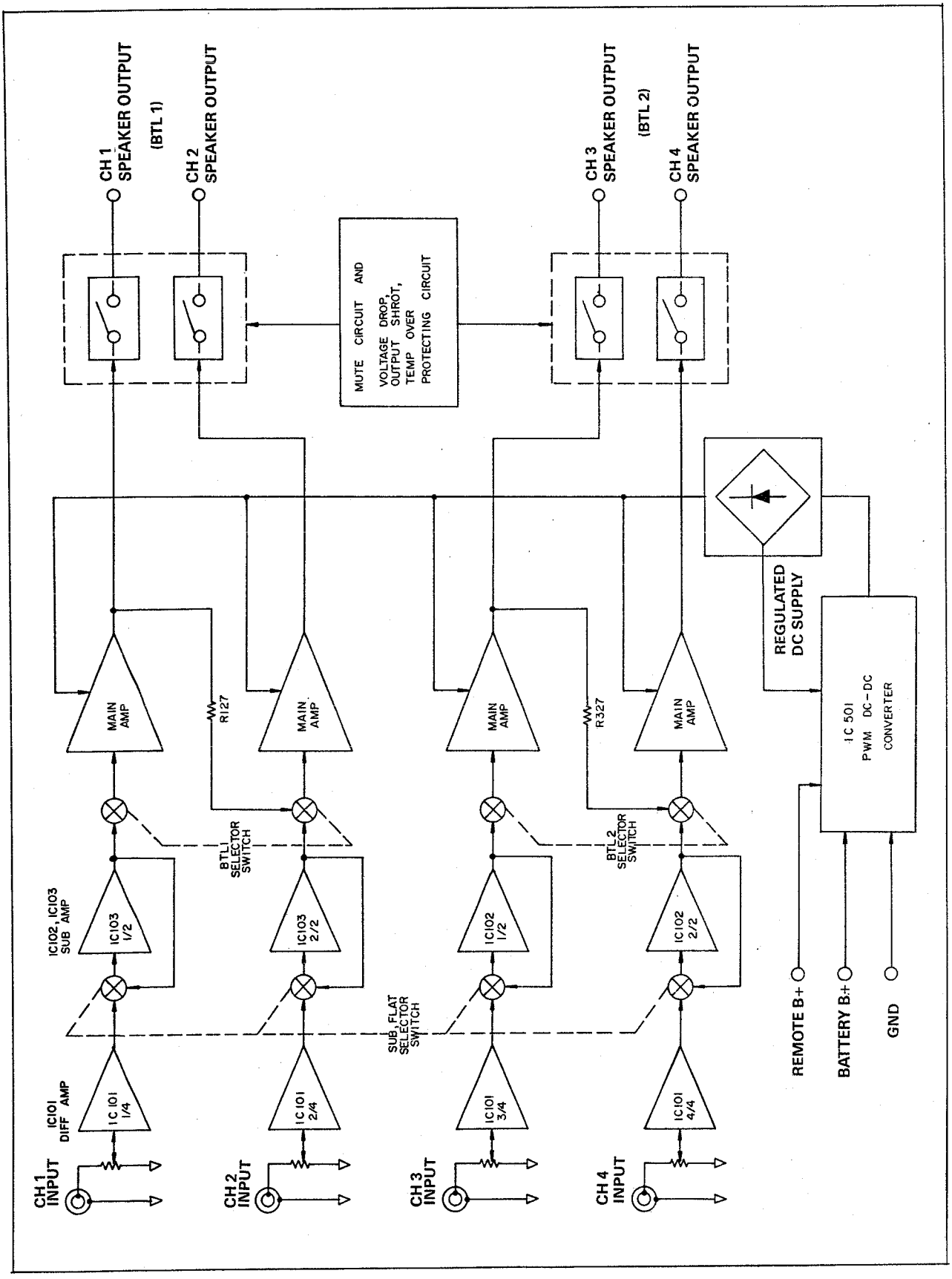
Output Power (Watts)/CH into 4ohms	
@ 50Hz~20KHz, 0.5% THD	60W
@ 1KHz, 10% THD	70W
Output Power/BTL CH into 4ohms	
@ 1KHz, 0.5% THD	100W
Frequency Response, −3dB 5Hz~40KHz	
SUB Bass EQ. Response @ 60Hz	+6 dB
@ 40Hz	0 dB
Signal to Noise Ratio (IHF A), WTD/UNWTD	85/80dB
Input Sensitivity/10k ohms	
@ HIGH	250mV
@ LOW	1 V
Operating Voltage	DC11V~16V
Speaker Impedance	4 ohms
Dimension (W×H×D)	328×74×227mm
Net Weight	3.85 Kg
Fuse, Main	60A

Note: Design & specification subject to change without notic for improvements.

Block Diagram *(SCP-802BP/GA-1071BP)*



Block Diagram (SCP-1002BP/GA-1072BP)



Electrical Parts List (SCP-802BP/GA-1071BP)

Ref. No.	Part No.	Description	Position
Main P.C. Board 4002609100			
• Integrated Circuits			
IC501	2318013118	μPC494C NEC	A4
• Transistors			
Q101	2208606104	NPN KTC 1815Y Silicon KEC	A2
Q102	2008015700	PNP 2SA 798G Silicon MATSUSHITA	A2
Q103	2208606104	NPN KTC 1815Y Silicon KEC	A2
Q104	2008206102	PNP KTA 949Y Silicon KEC	A2
Q105	2008606107	NPN 2SC 2229Y Silicon KEC	A2
Q106	2208606104	NPN KTC 1815Y Silicon KEC	A2
Q107	2028406120	NPN 2SC 2235Y Silicon KEC	A2
Q108	2028106107	PNP KTA 965Y Silicon KEC	A2
Q109	2028416108	NPN 2SC 3853 Silicon KEC	A2
Q110	2028116105	PNP 2SA 1489 Silicon TOSHIBA	A2
Q111	2208606104	NPN KTC 1815Y Silicon KEC	A2
Q112~Q200		Not used	
Q201	2208606104	NPN KTC 1815Y Silicon KEC	A1
Q202	2008015700	PNP 2SA 798G Silicon MATSUSHITA	A1
Q203	2208606104	NPN KTC 1815Y Silicon KEC	A1
Q204	2008206102	PNP KTA 949Y Silicon KEC	A1
Q205	2008606107	NPN 2SC 2229Y Silicon KEC	A1
Q206	2208606104	NPN KTC 1815Y Silicon KEC	A1
Q207	2028406120	NPN 2SC 2235Y Silicon KEC	A1
Q208	2028106107	PNP KTA 965Y Silicon KEC	A1
Q209	2028416108	NPN 2SC 3853 Silicon KEC	A1
Q210	2028116105	PNP 2SA 1489 Silicon TOSHIBA	A1
Q211	2208606104	NPN KTC 1815Y Silicon KEC	A1
Q212~Q200		Not used	
Q301	2208606104	NPN KTC 1815Y Silicon KEC	B2
Q302	2008015700	PNP 2SA 798G Silicon MATSUSHITA	B2
Q303	2208606104	NPN KTC 1815Y Silicon KEC	B2
Q304	2008206102	PNP KTA 949Y Silicon KEC	B2
Q305	2008606107	NPN 2SC 2229Y Silicon KEC	B2
Q306	2208606104	NPN KTC 1815Y Silicon KEC	B2
Q307	2028406120	NPN 2SC 2235Y Silicon KEC	B2
Q308	2028106107	PNP KTA 965Y Silicon KEC	B2
Q309	2028416108	NPN 2SC 3853 Silicon KEC	B2
Q310	2028116105	PNP 2SA 1489 Silicon TOSHIBA	B2
Q311	2208606104	NPN KTC 1815Y Silicon KEC	B2
Q312~Q400		Not used	
Q401	2208606104	NPN KTC 1815Y Silicon KEC	B1
Q402	2008015700	PNP 2SA 798G Silicon MATSUSHITA	B1
Q403	2208606104	NPN KTC 1815Y Silicon KEC	B1
Q404	2008206102	PNP KTA 949Y Silicon KEC	B1
Q405	2008606107	NPN 2SC 2229Y Silicon KEC	B1
Q406	2208606104	NPN KTC 1815Y Silicon KEC	B1
Q407	2028406120	NPN 2SC 2235Y Silicon KEC	B1
Q408	2028106107	PNP KTA 965Y Silicon KEC	B1
Q409	2028416108	NPN 2SC 3853 Silicon KEC	B1
Q410	2028116105	PNP 2SA 1489 Silicon TOSHIBA	B1
Q411	2208606104	NPN KTC 1815Y Silicon KEC	B1
Q412~Q500		Not used	
Q501L/R		Not used	
Q502	2208206105	PNP KTA 1015Y Silicon KEC	A1
Q503	2208206105	PNP KTA 1015Y Silicon KEC	B1
Q504	2208206105	PNP KTA 1015Y Silicon KEC	A4
Q505	2208206105	PNP KTA 1015Y Silicon KEC	B4
Q506	2008617100	NPN 2SD 600F Silicon SANYO	A4
Q507	2008617100	NPN 2SD 600F Silicon SANYO	B4
Q508	2028417112	NPN 2SD 1212S Silicon SANYO	B4
Q509	2028417112	NPN 2SD 1212S Silicon SANYO	A4
Q510	2028417112	NPN 2SD 1212S Silicon SANYO	A3
Q511	2028417112	NPN 2SD 1212S Silicon SANYO	B3
Q512	2028406120	NPN 2SC 2235Y Silicon KEC	B4
Q513	2208606104	NPN KTC 1815Y Silicon KEC	B4
Q514	2208206105	PNP KTA 1015Y Silicon KEC	B4
• Diodes			
D101	2058599111	Zener DZ-18BM 18V/500mW Silicon	A2
D102~D106	2058322101	Switching 1N4148(M) 60V/500mW Silicon	A2
D107~D200		Not used	
D201		Not used	
D202~D206	2058322101	Switching 1N4148(M) 60V/500mW Silicon	A1
D207~D300		Not used	
D301	2058599111	Zener DZ-18BM 18V/500mW Silicon	B2
D302~D306	2058322101	Switching 1N4148(M) 60V/500mW Silicon	B2
D307~D400		Not used	
D401		Not used	
D402~D406	2058322101	Switching 1N4148(M) 60V/500mW Silicon	B1
D407~D500		Not used	
D501~D503		See Front P.C. Board	
D504L/R		Not used	
D505	2058599107	Zener DZ-9.1BM 9.1V/500mW Silicon	A1
D506	2058322101	Switching 1N4148(M) 60V/500mW Silicon	A1
D507	2058322101	Switching 1N4148(M) 60V/500mW Silicon	A2
D508	2058322101	Switching 1N4148(M) 60V/500mW Silicon	A3
D509	2058116103	Rectifier CTU-22S Silicon	A3
D510	2058116104	Rectifier CTU-22R Silicon	B3
D511	2058100105	Rectifier 1N5402 200/3A Silicon	A3
D512		Not used	
D513,D514	2058106100	Rectifier 1N4002 100/1A Silicon	A/B4
D515,D516	2058106100	Rectifier 1N4002 100/1A Silicon	A/B4
D517	2058599107	Zener DZ-9.1BM 9.1V/500mW Silicon	B4
D518	2058106100	Rectifier 1N4002 100/1A Silicon	B4
D519	2058322101	Switching 1N4148(M) 60V/500mW Silicon	B4
D520~D521	2058106100	Rectifier 1N4002 100/1A Silicon	B3
• Coils			
L101	2648601550	Inductor Coil 1.42 μH	A2
L201	2648601550	Inductor Coil 1.42 μH	A1
L301	2648601550	Inductor Coil 1.42 μH	B2
L401	2648601550	Inductor Coil 1.42 μH	B1
L501,L502	2648601930	Coil Choke Ring, 60 μH	A/B3
• Trans			
T501	2898000040	Choke Trans TKK	B3
T502	2888101200	Switching Power Trans Ring φ40	A3
• Capacitors			
C101~C108		See Front P.C. Board	

Ref. No.	Part No.	Description					Position
C109	3479210971	Electrolytic	1 μF	50V	SA	M	
C110	3579561130	Ceramic	560 pF	50V		J	
C111	3679102120	Mylar	0.001 μF	100V		J	
C112 ~ C115	3479222061	Electrolytic	22 μF	35V	SA	M	
C116		Not used					
C117	3579509030	Ceramic	5 pF	50V		Z	
C118	3479247021	Electrolytic	47 μF	10V	SA	M	
C119	3579331130	Ceramic	330 pF	50V		J	
C120,C121	3579101130	Ceramic	100 pF	50V		J	
C122	3479247871	Electrolytic	0.47 μF	50V	SA	M	
C123	3679473120	Mylar	0.047 μF	100V		J	
C124 ~ C126		See Front P.C. Board					
C127 *	3579471130	Ceramic	470 pF	50V		J	
C128 *	3579471130	Ceramic	470 pF	50V		J	
C129 ~ C200		Not used					
C201 ~ C208		See Front P.C. Board					
C209	3479210971	Electrolytic	1 μF	50V	SA	M	
C210	3579561130	Ceramic	560 pF	50V		J	
C211	3679102120	Mylar	0.001 μF	100V		J	
C212 ~ C215	3479222061	Electrolytic	22 μF	35V	SA	M	
C216		Not used					
C217	3579509030	Ceramic	5 pF	50V		Z	
C218	3479247021	Electrolytic	47 μF	10V	SA	M	
C219	3579331130	Ceramic	330 pF	50V		J	
C220,C221	3579101130	Ceramic	100 pF	50V		J	
C222	3479247871	Electrolytic	0.47 μF	50V	SA	M	
C223	3679473120	Mylar	0.047 μF	100V		J	
C224 ~ C226		See Front P.C. Board					
C227 *	3579471130	Ceramic	470 pF	50V		J	
C228 *	3579471130	Ceramic	470 pF	50V		J	
C229 ~ C300		Not used					
C301 ~ C308		See Front P.C. Board					
C309	3479210971	Electrolytic	1 μF	50V	SA	M	
C310	3579561130	Ceramic	560 pF	50V		J	
C311	3679102120	Mylar	0.001 μF	100V	J		
C312 ~ C315	3479222061	Electrolytic	22 μF	35V	SA	M	
C316		Not used					
C317	3579509030	Ceramic	5 pF	50V		Z	
C318	3479247021	Electrolytic	47 μF	10V	SA	M	
C319	3579331130	Ceramic	330 pF	50V		J	
C320,C321	3579101130	Ceramic	100 pF	50V		J	
C322	3479247871	Electrolytic	0.47 μF	50V	SA	M	
C323	3679473120	Mylar	0.047 μF	100V		J	
C324 ~ C326		See Front P.C. Board					
C327	3579471130	Ceramic	470 pF	50V		J	
C328	3579471130	Ceramic	470 pF	50V		J	
C324 ~ C400		Not used					
C401 ~ C408		See Front P.C. Board					
C409	3479210971	Electrolytic	1 μF	50V	SA	M	
C410	3579561130	Ceramic	560 pF	50V		J	
C411	3679102120	Mylar	0.001 μF	100V		J	
C412 ~ C415	3479222061	Electrolytic	22 μF	35V	SA	M	
C416		Not used					
C417	3579509030	Ceramic	5 pF	50V		Z	
C418	3479247021	Electrolytic	47 μF	10V	SA	M	
C419	3579331130	Ceramic	330 pF	50V		J	
C420,C421	3579101130	Ceramic	100 pF	50V		J	
C422	3479247871	Electrolytic	0.47 μF	50V	SA	M	

Ref. No.	Part No.	Description					Position
C423	3679473120	Mylar	0.047 μF	100V		J	
C424 ~ C426		See Front P.C. Board					
C427 *	3579471130	Ceramic	470 pF	50V		J	
C428 *	3579471130	Ceramic	470 pF	50V		J	
C424 ~ C500		Not used					
C501 ~ C506		See Front P.C. Board					
C507	3479210071	Electrolytic	10 μF	50V	SA	M	
C508	3679102120	Mylar	0.001 μF	100V	J		
C509	3479247971	Electrolytic	4.7 μF	50V	SA	M	
C510	3479210071	Electrolytic	10 μF	50V	SA	M	
C511	3679268971	Electrolytic	6.8 μF	50V	SA	M	
C512,C513		Not used					
C514,C515	3419547214	Electrolytic	4700 μF	35V	RH	M	
C516,C517		Not used					
C518,C519	3409210236	Electrolytic	1000 μF	16V	RM	M	
C520	3479247971	Electrolytic	4.7 μF	50V	SA	M	
C521	3479103530	Ceramic	0.01 μF	50V		Z	
C522,C523	3479210121	Electrolytic	100 μF	10V	SA	M	
C524	3679223120	Mylar	0.022 μF	100V		J	
C525	3579331130	Ceramic	330 pF	50V		Z	
C526	3479210971	Electrolytic	1 μF	50V	SA	M	
C527	3679102120	Mylar	0.001 μF	100V		J	
C528,C529	3479210071	Electrolytic	10 μF	50V	SA	M	
C530	3579104530	Ceramic	0.1 μF	50V		Z	
C531 ~ C549		Not used					
C550	3409210236	Electrolytic	1000 μF	16V	RM	M	
C551	3579104530	Ceramic	0.1 μF	50C		Z	

• Resistors (All Resistors are Carbon Film 1/4W J Type unless otherwise noted.)

R101 ~ R114		See Front P.C. Board	
R115	3069472270	4.7k ohm	
R116	3069104270	100k ohm	
R117	3069152270	1.5k ohm	
R118	3069183270	18k ohm	
R119	3069564270	560k ohm	
R120	3069152270	1.5k ohm	
R121	3069821270	820 ohm	
R122	3069272270	2.7k ohm	
R123	3069153270	15k ohm	
R124	3069121270	120 ohm	
R125	3069473270	47k ohm	
R126	3069121270	120 ohm	
R127	3069473270	47k ohm	
R128	3069151270	150 ohm	
R129	3069222270	2.2k ohm	
R130	30639102270	1k ohm	
R131,R132	3069151270	150 ohm	
R133	3069331270	330 ohm	
R134	3059278686	0.27 ohm	W.W ERF-3GEKR 27, 3W
R135	3069222270	2.2k ohm	
R136,R137	3069100370	10 ohm	Metal Film 1/2W
R138	3069153270	15k ohm	
R139 *	3069109270	1 ohm	
R140 ~ R200		Not used	
R201 ~ R214		See Front P.C. Board	
R215	3069472270	4.7k ohm	
R216	3069104270	100k ohm	
R217	3069152270	1.5k ohm	

Ref. No.	Part No.	Description	Position
R218	3069183270	18k ohm	
R219	3069564270	560k ohm	
R220	3069152270	1.5k ohm	
R221	3069821270	820 ohm	
R222	3069272270	2.7k ohm	
R223	3069153270	15k ohm	
R224	3069121270	120 ohm	
R225	3069473270	47k ohm	
R226	3069121270	120 ohm	
R227		Not used	
R228	3069151270	150 ohm	
R229	3069222270	2.2k ohm	
R230	30639102270	1k ohm	
R231,R232	3069151270	150 ohm	
R233	3069331270	330 ohm	
R234	3059278686	0.27 ohm W.W ERF-3GEKR 27, 3W	
R235	3069222270	2.2k ohm	
R236,R237	3069100370	10 ohm Metal Film 1/2W	
R238	3069153270	15k ohm	
R239 *	3069109270	1 ohm	
R240 ~ R300		Not used	
R301 ~ R314		See Front P.C. Board	
R315	3069472270	4.7k ohm	
R316	3069104270	100k ohm	
R317	3069152270	1.5k ohm	
R318	3069183270	18k ohm	
R319	3069564270	560k ohm	
R320	3069152270	1.5k ohm	
R321	3069821270	820 ohm	
R322	3069272270	2.7k ohm	
R323	3069153270	15k ohm	
R324	3069121270	120 ohm	
R325	3069473270	47k ohm	
R326	3069121270	120 ohm	
R327	3069473270	47k ohm	
R328	3069151270	150 ohm	
R329	3069222270	2.2k ohm	
R330	30639102270	1k ohm	
R331,R332	3069151270	150 ohm	
R333	3069331270	330 ohm	
R334	3059278686	0.27 ohm W.W ERF-3GEKR 27, 3W	
R335	3069222270	2.2k ohm	
R336,R337	3069100370	10 ohm Metal Film 1/2W	
R338	3069153270	15k ohm	
R336,R337	3069100370	10 ohm Metal Film 1/2W	
R338	3069153270	15k ohm	
R339 *	3069109270	1 ohm	
R340 ~ R400		Not used	
R401 ~ R414		See Front P.C. Board	
R415	3069472270	4.7k ohm	
R416	3069104270	100k ohm	
R417	3069152270	1.5k ohm	
R418	3069183270	18k ohm	
R419	3069564270	560k ohm	
R420	3069152270	1.5k ohm	
R421	3069821270	820 ohm	
R422	3069272270	2.7k ohm	
R423	3069153270	15k ohm	
R424	3069121270	120 ohm	
R425	3069473270	47k ohm	

Ref. No.	Part No.	Description	Position
R426	3069121270	120 ohm	
R427	3069473270	47k ohm	
R428	3069151270	150 ohm	
R429	3069222270	2.2k ohm	
R430	30639102270	1k ohm	
R431,R432	3069151270	150 ohm	
R433	3069331270	330 ohm	
R434	3059278686	0.27 ohm W.W ERF-3GEKR 27, 3W	
R435	3069222270	2.2k ohm	
R436,R437	3069100370	10 ohm Metal Film 1/2W	
R438	3069153270	15k ohm	
R439 *	3069109270	1 ohm	
R440 ~ R500		Not used	
R501 ~ R507		See Front P.C. Board	
R508 ~ R511	3069472270	4.7k ohm	
R512,R513	3069104270	100k ohm	
R514 ~ R516		Not used	
R517L/R	3069223270	22k ohm	
R518	3069681270	680 ohm	
R519	3069223270	22k ohm	
R520	3069102270	1k ohm	
R521	3069104270	100k ohm	
R522	3069103270	10k ohm	
R523	3069473270	47k ohm	
R524	3069103270	10k ohm	
R525	3069474270	470k ohm	
R526	3069101270	100 ohm	
R527	3069272270	2.7k ohm	
R528	3069153270	15k ohm	
R529	3069272270	2.7k ohm	
R530	3069822270	8.2k ohm	
R531	3069332270	3.3k ohm	
R532	3069822270	8.2k ohm	
R533	2438012100	Posistor PTH487A01-BE22	
R534	3069332270	3.3k ohm	
R535	3069101270	100 ohm	
R536	3069183270	18k ohm	
R537	3069682270	6.8k ohm	
R538	3069473270	47k ohm	
R539,R540	3069103270	10k ohm	
R541	3069682270	6.8k ohm	
R542	3069272270	2.7k ohm	
R543	3069103270	10k ohm	
R544	3069683270	68k ohm	
R545	3069100270	10 ohm	
R546	3069151270	150 ohm	
R547	3069470270	47 ohm	
R548,R549	3069103270	10k ohm	
R550,R551	3069102270	1k ohm	
R552,R553	3069222270	2.2k ohm	
R554	3069330270	33 ohm	
R555	3069271270	270 ohm	
R556	3069330270	33 ohm	
R557	3069271270	270 ohm	
R558,R559	3069109270	1 ohm	
R560	3069101270	100 ohm	
R561,R562	3069109270	1 ohm	
R563,R564	3069101270	100 ohm	
R565	3039221472	220 ohm Metal Oxided 1W	
R566 ~ R907		Not used	
R908	3069101270	100 ohm	

Ref. No.	Part No.	Description	Position
Front P.C. Board 4002602000			
• Integrated Circuits			
IC101	2168000113	LM324, Quad OP Amp. SAM SUNG	
IC102,IC103	2168000114	MC 4558C, Dual OP Amp. SAM SUNG	
• Diodes			
D501	2308220109	L.E.D SLA54URC3 5V/20mA	
D502,D503	2058599109	Zener DZ-15BM 15V/500mW Silicon	
• Semi-Fixed Variable Resistors			
VR101	3248322319	RES SEMI SR19D L100, B-22K	
VR201	3248322319	RES SEMI SR19D L100, B-22K	
VR301	3248322319	RES SEMI SR19D L100, B-22K	
VR401	3248322319	RES SEMI SR19D L100, B-22K	
• Capacitors			
C101,C102	3479233971	Electrolytic 3.3 μF 50V SA M	
C103,C104	3679223120	Mylar 0.022 μF 100V J	
C105	3479233971	Electrolytic 3.3 μF 50V SA M	
C106	3579471130	Ceramic 470 pF 50V J	
C107	3479233971	Electrolytic 3.3 μF 50V SA M	
C108	3479247021	Electrolytic 47 μF 10V SA M	
C124 *	3579471130	Ceramic 470 pF 50V J	
C125 *	3579471130	Ceramic 470 pF 50V J	
C126 *	3579471130	Ceramic 470 pF 50V J	
C201,C202	3479233971	Electrolytic 3.3 μF 50V SA M	
C203,C204	3679223120	Mylar 0.022 μF 100V J	
C205	3479233971	Electrolytic 3.3 μF 50V SA M	
C206	3579471130	Ceramic 470 pF 50V J	
C207	3479233971	Electrolytic 3.3 μF 50V SA M	
C208	3479247021	Electrolytic 47 μF 10V SA M	
C224 *	3579471130	Ceramic 470 pF 50V J	
C225 *	3579471130	Ceramic 470 pF 50V J	
C226 *	3579471130	Ceramic 470 pF 50V J	
C301,C302	3479233971	Electrolytic 3.3 μF 50V SA M	
C303,C304	3679223120	Mylar 0.022 μF 100V J	
C305	3479233971	Electrolytic 3.3 μF 50V SA M	
C306	3579471130	Ceramic 470 pF 50V J	
C307	3479233971	Electrolytic 3.3 μF 50V SA M	
C308	3479247021	Electrolytic 47 μF 10V SA M	
C324 *	3579471130	Ceramic 470 pF 50V J	
C325 *	3579471130	Ceramic 470 pF 50V J	
C326 *	3579471130	Ceramic 470 pF 50V J	
C401,C402	3479233971	Electrolytic 3.3 μF 50V SA M	
C403,C404	3679223120	Mylar 0.022 μF 100V J	
C405	3479233971	Electrolytic 3.3 μF 50V SA M	
C406	3579471130	Ceramic 470 pF 50V J	
C407	3479233971	Electrolytic 3.3 μF 50V SA M	
C408	3479247021	Electrolytic 47 μF 10V SA M	
C424 *	3579471130	Ceramic 470 pF 50V J	
C425 *	3579471130	Ceramic 470 pF 50V J	
C426 *	3579471130	Ceramic 470 pF 50V J	
C501 ~ C506	3479247031	Electrolytic 47 μF 16V SA M	

Ref. No.	Part No.	Description	Position
• Resistors (All Resistors are Carbon Film 1/4W J Type unless otherwise noted.)			
R101 ~ R105	3069103270	10k ohm	
R106		Not used	
R107	3069823270	82k ohm	
R108	3069562270	5.6k ohm	
R109	3069224270	220k ohm	
R110	3069332270	3.3k ohm	
R111	3069562270	5.6k ohm	
R112	3069472270	4.7k ohm	
R113	3069152270	1.5k ohm	
R114	3069472270	4.7k ohm	
R201 ~ R205	3069103270	10k ohm	
R206		Not used	
R207	3069823270	82k ohm	
R208	3069562270	5.6k ohm	
R209	3069224270	220k ohm	
R210	3069332270	3.3k ohm	
R211	3069562270	5.6k ohm	
R212	3069472270	4.7k ohm	
R213,R214		Not used	
R301 ~ R305	3069103270	10k ohm	
R306		Not used	
R307	3069823270	82k ohm	
R308	3069562270	5.6k ohm	
R309	3069224270	220k ohm	
R310	3069332270	3.3k ohm	
R311	3069562270	5.6k ohm	
R312	3069472270	4.7k ohm	
R313	3069152270	1.5k ohm	
R314	3069472270	4.7k ohm	
R401 ~ R405	3069103270	10k ohm	
R406		Not used	
R407	3069823270	82k ohm	
R408	3069562270	5.6k ohm	
R409	3069224270	220k ohm	
R410	3069332270	3.3k ohm	
R411	3069562270	5.6k ohm	
R412	3069472270	4.7k ohm	
R413,R414		Not used	
R501	3069102270	1k ohm	
R502 ~ R505	3069331270	330 ohm	
R506,R507	3069122270	1.2k ohm	
• Others			
	4119102085	Wire Slat 2P, 80mm	
	4119102145	Wire Slat 2P, 140mm	
	4119111055	Wire Slat 11P, 50mm	
	4438103410	RCA Jack 4P, AP4-0096	
	4618006810	Switch Slide, SSP042	
	4328202710	RCA Cord 4P	
	5508724215	Fuse Auto 30A/32V	
	6065101110	Cap Cord RCA	
	4462000210	Terminal Ass'y 4P-GA	
	4462000110	Terminal Ass'y 6P-GA	

Note: RESISTOR/CAPACITOR TOLERANCE; D: ±0.5%, J: ±5%, K: ±10%, M: ±20%, Z: +80%, −20%
For * Marks C124,C125,C126,C127,C128,R139, C224,C225,C226,C227,C228,R239, C324,C325,C326,C327,C328,R339, C424,C425,C426 C427,C428,R439, is I.E (F.T.Z) Only Item.

Electrical Parts List (SCP-1002BP/GA-1072BP)

Ref. No.	Part No.	Description	Position
Main P.C. Board 4002602200			
• Integrated Circuits			
IC501	2318013118	μPC494C NEC	A4
• Transistors			
Q101	2008015700	PNP 2SA 798G Silicon MATSUSHITA	A2
Q102	2208606104	NPN KTC 1815Y Silicon KEC	A2
Q103	2008206102	PNP KTA 949Y Silicon KEC	A2
Q104	2208606104	NPN KTC 1815Y Silicon KEC	A2
Q105	2008606107	NPN 2SC 2229Y Silicon KEC	A2
Q106	2028406120	NPN KTC 2235Y Silicon KEC	A2
Q107	2028106107	PNP KTA 965Y Silicon KEC	A2
Q108	2028416107	NPN 2SC 3854 Silicon KEC	A2
Q109	2028116104	PNP 2SA 1490 Silicon KEC	A2
Q110	2208606104	NPN KTC 1815Y Silicon KEC	A2
Q111 ~ Q200		Not used	
Q201	2008015700	PNP 2SA 798G Silicon MATSUSHITA	A1
Q202	2208606104	NPN KTC 1815Y Silicon KEC	A1
Q203	2008206102	PNP KTA 949Y Silicon KEC	A1
Q204	2208606104	NPN KTC 1815Y Silicon KEC	A1
Q205	2008606107	NPN 2SC 2229Y Silicon KEC	A1
Q206	2028406120	NPN KTC 2235Y Silicon KEC	A1
Q207	2028106107	PNP KTA 965Y Silicon KEC	A1
Q208	2028416107	NPN 2SC 3854 Silicon KEC	A1
Q209	2028116104	PNP 2SA 1490 Silicon KEC	A1
Q210	2208606104	NPN KTC 1815Y Silicon KEC	A1
Q211 ~ Q200		Not used	
Q301	2008015700	PNP 2SA 798G Silicon MATSUSHITA	B2
Q302	2208606104	NPN KTC 1815Y Silicon KEC	B2
Q303	2008206102	PNP KTA 949Y Silicon KEC	B2
Q304	2208606104	NPN KTC 1815Y Silicon KEC	B2
Q305	2008606107	NPN 2SC 2229Y Silicon KEC	B2
Q306	2028406120	NPN KTC 2235Y Silicon KEC	B2
Q307	2028106107	PNP KTA 965Y Silicon KEC	B2
Q308	2028416107	NPN 2SC 3854 Silicon KEC	B2
Q309	2028116104	PNP 2SA 1490 Silicon KEC	B2
Q310	2208606104	NPN KTC 1815Y Silicon KEC	B2
Q311 ~ Q400		Not used	
Q401	2008015700	PNP 2SA 798G Silicon MATSUSHITA	B1
Q402	2208606104	NPN KTC 1815Y Silicon KEC	B1
Q403	2008206102	PNP KTA 949Y Silicon KEC	B1
Q404	2208606104	NPN KTC 1815Y Silicon KEC	B1
Q405	2008606107	NPN 2SC 2229Y Silicon KEC	B1
Q406	2028406120	NPN KTC 2235Y Silicon KEC	B1
Q407	2028106107	PNP KTA 965Y Silicon KEC	B1
Q408	2028416107	NPN 2SC 3854 Silicon KEC	B1
Q409	2028116104	PNP 2SA 1490 Silicon KEC	B1
Q410	2208606104	NPN KTC 1815Y Silicon KEC	B1
Q411 ~ Q500		Not used	
Q501L/R		Not used	
Q502	2208206105	PNP KTA 1015Y Silicon KEC	B2
Q503	2208606104	NPN KTC 1815Y Silicon KEC	A1
Q504	2208606104	NPN KTC 1815Y Silicon KEC	B1
Q505	2208206105	PNP KTA 1015Y Silicon KEC	B3
Q506	2208606104	NPN KTC 1815Y Silicon KEC	B1
Q507	2028406120	NPN KTC 2235Y Silicon KEC	B1
Q508	2208206105	PNP KTA 1015Y Silicon KEC	B4
Q509	2208206105	PNP KTA 1015Y Silicon KEC	A4
Q510	2008617100	NPN 2SD 600F Silicon SANYO	B4
Q511	2008617100	NPN 2SP 600F Silicon SANYO	A4
Q512,Q513	2028417113	NPN 2SD 1213S Silicon SANYO	B4
Q514	2028417113	NPN 2SP 1213S Silicon SANYO	B3
Q515,Q516	2028417113	NPN 2SD 1213S Silicon SANYO	A4
Q517	2028417113	NPN 2SD 1213S Silicon SANYO	A3
Q518	2028406120	NPN KTC 2235Y Silicon KEC	B4
Q519	2208606104	NPN KTC 1815Y Silicon KEC	B4
Q520	2208206105	PNP KTA 1015Y Silicon KEC	B4
• Diodes			
D101	2058599112	Zener DZ-20BM 20V/500mW Silicon	A2
D102 ~ D106	2058322101	Switching 1N4148(M) 60V/500mW Silicon	A2
D107 ~ D200		Not used	
D201	2058599112	Zener DZ-20BM 20V/500mW Silicon	A1
D202 ~ D206	2058322101	Switching 1N4148(M) 60V/500mW Silicon	A1
D207 ~ D300		Not used	
D301	2058599112	Zener DZ-20BM 20V/500mW Silicon	B2
D302 ~ D306	2058322101	Switching 1N4148(M) 60V/500mW Silicon	B2
D307 ~ D400		Not used	
D401	2058599112	Zener DZ-20BM 20V/500mW Silicon	B1
D402 ~ D406	2058322101	Switching 1N4148(M) 60V/500mW Silicon	B1
D407 ~ D500		Not used	
D501 ~ D503		See Front P.C. Board	
D504,D505		Not used	
D506	2058599107	Zener DZ-9.1BM 9.1V/500mW Silicon	B1
D507	2058106100	Rectifier 1N4002 100/1A Silicon	A/B2
D508	2058106100	Rectifier 1N4002 100/1A Silicon	A1/2
D509	2058322101	Switching 1N4148(M) 60V/500mW Silicon	B3
D510	2058116103	Rectifier CTU-22S Silicon	A3
D511	2058116104	Rectifier CTU-22R Silicon	B3
D512	2058100105	Rectifier 1N5402 200/3A Silicon	A4
D513	2058106100	Rectifier 1N4002 100/1A Silicon	B4
D514	2058106100	Rectifier 1N4002 100/1A Silicon	A4
D515	2058106100	Rectifier 1N4002 100/1A Silicon	A/B4
D516	2058106100	Rectifier 1N4002 100/1A Silicon	A4
D517	2058599107	Zener DZ-9.1BM 9.1V/500mW Silicon	B4
D518	2058106100	Rectifier 1N4002 100/1A Silicon	B4
D519	2058322101	Switching 1N4148(M) 60V/500mW Silicon	B4
D520	2058322101	Switching 1N4148(M) 60V/500mW Silicon	A3
D521 ~ D521	2058106100	Rectifier 1N4002 100/1A Silicon	A3
• Coils			
L101	2648601550	Inductor Coil 1.42 μH	A2
L201	2648601550	Inductor Coil 1.42 μH	A1
L301	2648601550	Inductor Coil 1.42 μH	B2
L401	2648601550	Inductor Coil 1.42 μH	B1
L501	5528001440	Relay MRCR 323, DC24V	A/B2
L502	5528001440	Relay MRCR 323, DC24V	A/B1
L503	2648601930	Coil Choke Ring, 60μH	A3
L504	2648601930	Coil Choke Ring, 60μH	B3
L505	2898000080	Coil Choke Trans	B4
• Trans			
T501	2888101300	Switching Power Trans Ring φ50	

Ref. No.	Part No.	Description					Position
• Capacitors							
C101 ~ C108		See Front P.C. Board					
C109	3479210971	Electrolytic	1 μF	50V	SA	M	
C110,C111	3679102120	Mylar	0.001 μF	100V		J	
C112 ~ C115	3479222061	Electrolytic	22 μF	35V	SA	M	
C116	3479210971	Electrolytic	1 μF	50V	SA	M	
C117	3479247021	Electrolytic	47 μF	10V	SA	Z	
C118	3579509030	Ceramic	5 pF	50V		J	
C119	3579101130	Ceramic	100 pF	50V		J	
C120	3579331130	Ceramic	330 pF	50V		J	
C121	3579101130	Ceramic	100 pF	50V		J	
C122	3479247871	Electrolytic	0.47 μF	50V	SA	M	
C123	3679473120	Mylar	0.047 μF	100V		J	
C124 ~ C126		See Front P.C. Board					
C127 *	3509100130	Ceramic	10 pF	50V		J	
C128 *	3509473130	Ceramic	0.047 μF	50V		J	
C129 ~ C200		Not used					
C201 ~ C208		See Front P.C. Board					
C209	3479210971	Electrolytic	1 μF	50V	SA	M	
C210,C211	3679102120	Mylar	0.001 μF	100V		J	
C212 ~ C215	3479222061	Electrolytic	22 μF	35V	SA	M	
C216	3479210971	Electrolytic	1 μF	50V	SA	M	
C217	3479247021	Electrolytic	47 μF	10V	SA	Z	
C218	3579509030	Ceramic	5 pF	50V		J	
C219	3579101130	Ceramic	100 pF	50V		J	
C220	3579331130	Ceramic	330 pF	50V		J	
C221	3579101130	Ceramic	100 pF	50V		J	
C222	3479247871	Electrolytic	0.47 μF	50V	SA	M	
C223	3679473120	Mylar	0.047 μF	100V		J	
C224 ~ C226		See Front P.C. Board					
C227 *	3509100130	Ceramic	10 pF	50V		J	
C228 *	3509473130	Ceramic	0.047 μF	50V		J	
C229 ~ C300		Not used					
C301 ~ C308		See Front P.C. Board					
C309	3479210971	Electrolytic	1 μF	50V	SA	M	
C310,C311	3679102120	Mylar	0.001 μF	100V		J	
C312 ~ C315	3479222061	Electrolytic	22 μF	35V	SA	M	
C316	3479210971	Electrolytic	1 μF	50V	SA	M	
C317	3479247021	Electrolytic	47 μF	10V	SA	Z	
C318	3579509030	Ceramic	5 pF	50V		J	
C319	3579101130	Ceramic	100 pF	50V		J	
C320	3579331130	Ceramic	330 pF	50V		J	
C321	3579101130	Ceramic	100 pF	50V		J	
C322	3479247871	Electrolytic	0.47 μF	50V	SA	M	
C323	3679473120	Mylar	0.047 μF	100V		J	
C324 ~ C326		See Front P.C. Board					
C327 *	3509100130	Ceramic	10 pF	50V		J	
C328 *	3509473130	Ceramic	0.047 μF	50V		J	
C329 ~ C400		Not used					
C401 ~ C408		See Front P.C. Board					
C409	3479210971	Electrolytic	1 μF	50V	SA	M	
C410,C411	3679102120	Mylar	0.001 μF	100V		J	
C412 ~ C415	3479222061	Electrolytic	22 μF	35V	SA	M	
C416	3479210971	Electrolytic	1 μF	50V	SA	M	
C417	3479247021	Electrolytic	47 μF	10V	SA	Z	
C418	3579509030	Ceramic	5 pF	50V		J	

Ref. No.	Part No.	Description					Position
C419	3579101130	Ceramic	100 pF	50V		J	
C420	3579331130	Ceramic	330 pF	50V		J	
C421	3579101130	Ceramic	100 pF	50V		J	
C422	3479247871	Electrolytic	0.47 μF	50V	SA	M	
C423	3679473120	Mylar	0.047 μF	100V		J	
C424 ~ C426		See Front P.C. Board					
C427 *	3509100130	Ceramic	10 pF	50V		J	
C428 *	3509473130	Ceramic	0.047 μF	50V		J	
C429 ~ C500		Not used					
C501 ~ C506		See Front P.C. Board					
C507	3679102120	Mylar	0.001 μF	100V		J	
C508	3409247131	Electrolytic	470 μF	16V	SA	M	
C509	3479222061	Electrolytic	22 μF	35V	SA	M	
C510	3479210971	Electrolytic	1 μF	50V	SA	M	
C511	3479247031	Electrolytic	47 μF	16V	SA	M	
C512,C513	3679224120	Mylar	0.22 μF	100V		J	
C514,C515	3409233136	Electrolytic	330 μF	35V	RM	M	
C516,C517	3419568294	Electrolytic	6800 μF	40V	RM	M	
C518,C519	3409210236	Electrolytic	1000 μF	16V	RM	M	
C520	3479210971	Electrolytic	1 μF	50V	SA	M	
C521	3679102120	Mylar	0.001 μF	100V		J	
C522	3479210971	Electrolytic	1 μF	50V	SA	M	
C523	3579331130	Ceramic	330 pF	50V		Z	
C524	3679102120	Mylar	0.001 μF	100V		J	
C525	3579103530	Ceramic	0.01 μF	50V		Z	
C526	3479210121	Electrolytic	100 μF	10V	SA	M	
C527	3409222131	Electrolytic	220 μF	16V	SA	M	
C528,C529	3579104530	Ceramic	0.1 μF	50V		Z	
C530	3409210236	Electrolytic	1000 μF	16V	RM	M	
• Resistors (All Resistors are Carbon Film 1/4W J Type unless otherwise noted.)							
R101 ~ R114		See Front P.C. Board					
R115	3069102270	1k ohm					
R116	3069104270	100k ohm					
R117	3069152270	1.5k ohm					
R118	3069183270	18k ohm					
R119	3069561270	560 ohm					
R120	3069152270	1.5k ohm					
R121	3069821270	820 ohm					
R122	3069222270	2.2k ohm					
R123	3069153270	15k ohm					
R124	3069121270	120 ohm					
R125	3069473270	47k ohm					
R126	3069121270	120 ohm					
R127	3069473270	47k ohm					
R128	3069154270	150k ohm					
R129	3069222270	2.2k ohm					
R130	3069102270	1k ohm					
R131,R132	3069151270	150 ohm					
R133	3069331270	330 ohm					
R134	3059278786	0.27 ohm	DUAL C.W 5W				
R135	3069222270	2.2k ohm					
R136,R137	3069100370	10 ohm	Metal Film 1/2W				
R138	3069153270	15k ohm					
R139 *	3069109270	1 ohm					
R140 ~ R200		Not used					
R201 ~ R214		See Front P.C. Board					
R215	3069102270	1k ohm					

Ref. No.	Part No.	Description	Position
R216	3069104270	100k ohm	
R217	3069152270	1.5k ohm	
R218	3069183270	18k ohm	
R219	3069561270	560 ohm	
R220	3069152270	1.5k ohm	
R221	3069821270	820 ohm	
R222	3069222270	2.2k ohm	
R223	3069153270	15k ohm	
R224	3069121270	120 ohm	
R225	3069473270	47k ohm	
R226	3069121270	120 ohm	
R227	3069473270	47k ohm	
R228	3069154270	150k ohm	
R229	3069222270	2.2k ohm	
R230	3069102270	1k ohm	
R231,R232	3069151270	150 ohm	
R233	3069331270	330 ohm	
R234	3059278786	0.27 ohm DUAL C.W 5W	
R235	3069222270	2.2k ohm	
R236,R237	3069100370	10 ohm Metal Film 1/2W	
R238	3069153270	15k ohm	
R239 *	3069109270	1 ohm	
R240 ~ R300		Not used	
R301 ~ R314		See Front P.C. Board	
R315	3069102270	1k ohm	
R316	3069104270	100k ohm	
R317	3069152270	1.5k ohm	
R318	3069183270	18k ohm	
R319	3069561270	560 ohm	
R320	3069152270	1.5k ohm	
R321	3069821270	820 ohm	
R322	3069222270	2.2k ohm	
R323	3069153270	15k ohm	
R324	3069121270	120 ohm	
R325	3069473270	47k ohm	
R326	3069121270	120 ohm	
R327	3069473270	47k ohm	
R328	3069154270	150k ohm	
R329	3069222270	2.2k ohm	
R330	3069102270	1k ohm	
R331,R332	3069151270	150 ohm	
R333	3069331270	330 ohm	
R334	3059278786	0.27 ohm DUAL C.W 5W	
R335	3069222270	2.2k ohm	
R336,R337	3069100370	10 ohm Metal Film 1/2W	
R338	3069153270	15k ohm	
R339 *	3069109270	1 ohm	
R340 ~ R400		Not used	
R401 ~ R414		See Front P.C. Board	
R415	3069102270	1k ohm	
R416	3069104270	100k ohm	
R417	3069152270	1.5k ohm	
R418	3069183270	18k ohm	
R419	3069561270	560 ohm	
R420	3069152270	1.5k ohm	
R421	3069821270	820 ohm	
R422	3069222270	2.2k ohm	
R423	3069153270	15k ohm	
R424	3069121270	120 ohm	
R425	3069473270	47k ohm	

Ref. No.	Part No.	Description	Position
R426	3069121270	120 ohm	
R427	3069473270	47k ohm	
R428	3069154270	150k ohm	
R429	3069222270	2.2k ohm	
R430	3069102270	1k ohm	
R431,R432	3069151270	150 ohm	
R433	3069331270	330 ohm	
R434	3059278786	0.27 ohm DUAL C.W 5W	
R435	3069222270	2.2k ohm	
R436,R437	3069100370	10 ohm Metal Film 1/2W	
R438	3069153270	15k ohm	
R439 *	3069109270	1 ohm	
R440 ~ R500		Not used	
R501 ~ R507		See Front P.C. Board	
R508 ~ R510		Not used	
R511	3069103270	10k ohm	
R512	3069223270	22k ohm	
R513	3069151270	150 ohm	
R514	3069472270	4.7k ohm	
R515 ~ R518	3069153270	15k ohm	
R519	3069472270	4.7k ohm	
R520	3069103270	10k ohm	
R521	3069102270	1k ohm	
R522	3069182270	1.8k ohm	
R523	3069103270	10k ohm	
R524	3069151270	150 ohm	
R525	3069101270	100 ohm	
R526,R527	3069471270	470 ohm	
R528	3069472270	4.7k ohm	
R529	3069224270	220k ohm	
R530	3069103270	10k ohm	
R531	3069209270	2 ohm	
R532	3069101270	100 ohm	
R533	3069209270	2 ohm	
R534	3069101270	100 ohm	
R535	3069209270	2 ohm	
R536	3069101270	100 ohm	
R537	3069209270	2 ohm	
R538	3069101270	100 ohm	
R539	3069209270	2 ohm	
R540	3069101270	100 ohm	
R541	3069209270	2 ohm	
R542	3069101270	100 ohm	
R543,R544	3069330270	33 ohm	
R545,R546	3069101270	100 ohm	
R547,R548	3069222270	2.2k ohm	
R549,R550	3069682270	6.8k ohm	
R551,R552	3069103270	10k ohm	
R553	3069102270	1k ohm	
R554	3069153270	15k ohm	
R555	3069302270	3k ohm	
R556	3069153270	15k ohm	
R557	3069332270	3.3k ohm	
R558	3069223270	22k ohm	
R559	3069562270	5.6k ohm	
R560	3069393270	39k ohm	
R561	3069101270	100 ohm	
R562	3069183270	18k ohm	
R563	3069104270	100k ohm	
R564	3069470270	47 ohm	
R565	3069221270	220 ohm	
R566	3069100270	10 ohm	

Ref. No.	Part No.	Description	Position
R567	3069473270	47k ohm	
R568	3069103270	10k ohm	
R569	3069682270	6.8k ohm	
R570	3069272270	2.7k ohm	
R571,R572	3069103270	10k ohm	
R573	3069683270	68k ohm	
R574	2438012100	Posistor PTH487A01-BE22	
R575	3069221270	220 ohm	

Front P.C. Board 4002602000

• Integrated Circuits

IC101	2168000113	LM324, Quad OP Amp. SAM SUNG	
IC102,IC103	2168000114	MC 4558C, Dual OP Amp. SAM SUNG	

• Diodes

D501	2308220109	L.E.D SLA54URC3 5V/20mA	
D502,D503	2058599109	Zener DZ-15BM 15V/500mW Vicon	

• Semi-Fixed Variable Resistors

VR101	3248322319	RES SEMI SR19D L100, B-22K	
VR201	3248322319	RES SEMI SR19D L100, B-22K	
VR301	3248322319	RES SEMI SR19D L100, B-22K	
VR401	3248322319	RES SEMI SR19D L100, B-22K	

• Capacitors

C101,C102	3479233971	Electrolytic	3.3 μF	50V	SA	M	
C103,C104	3679223120	Mylar	0.022 μF	100V		J	
C105	3479233971	Electrolytic	3.3 μF	50V	SA	M	
C106	3579471130	Ceramic	470 pF	50V		J	
C107	3479233971	Electrolytic	3.3 μF	50V	SA	M	
C108	3479247021	Electrolytic	47 μF	10V	SA	M	
C124 *	3579471130	Ceramic	470 pF	50V		J	
C125 *	3579471130	Ceramic	470 pF	50V		J	
C126 *	3579471130	Ceramic	470 pF	50V		J	
C201,C202	3479233971	Electrolytic	3.3 μF	50V	SA	M	
C203,C204	3679223120	Mylar	0.022 μF	100V		J	
C205	3479233971	Electrolytic	3.3 μF	50V	SA	M	
C206	3579471130	Ceramic	470 pF	50V		J	
C207	3479233971	Electrolytic	3.3 μF	50V	SA	M	
C208	3479247021	Electrolytic	47 μF	10V	SA	M	
C224 *	3579471130	Ceramic	470 pF	50V		J	
C225 *	3579471130	Ceramic	470 pF	50V		J	
C226 *	3579471130	Ceramic	470 pF	50V		J	
C301,C302	3479233971	Electrolytic	3.3 μF	50V	SA	M	
C303,C304	3679223120	Mylar	0.022 μF	100V		J	
C305	3479233971	Electrolytic	3.3 μF	50V	SA	M	
C306	3579471130	Ceramic	470 pF	50V		J	
C307	3479233971	Electrolytic	3.3 μF	50V	SA	M	
C308	3479247021	Electrolytic	47 μF	10V	SA	M	
C324 *	3579471130	Ceramic	470 pF	50V		J	
C325 *	3579471130	Ceramic	470 pF	50V		J	
C326 *	3579471130	Ceramic	470 pF	50V		J	
C401,C402	3479233971	Electrolytic	3.3 μF	50V	SA	M	
C403,C404	3679223120	Mylar	0.022 μF	100V		J	
C405	3479233971	Electrolytic	3.3 μF	50V	SA	M	
C406	3579471130	Ceramic	470 pF	50V		J	
C407	3479233971	Electrolytic	3.3 μF	50V	SA	M	
C408	3479247021	Electrolytic	47 μF	10V	SA	M	
C424 *	3579471130	Ceramic	470 pF	50V		J	
C425 *	3579471130	Ceramic	470 pF	50V		J	
C426 *	3579471130	Ceramic	470 pF	50V		J	
C501 ~ C506	3479247031	Electrolytic	47 μF	16V	SA	M	

• Resistors (All Resistors are Carbon Film 1/4W J Type unless otherwise noted.)

R101 ~ R105	3069103270	10k ohm
R106		Not used
R107	3069823270	82k ohm
R108	3069562270	5.6k ohm
R109	3069224270	220k ohm
R110	3069332270	3.3k ohm
R111	3069562270	5.6k ohm
R112	3069472270	4.7k ohm
R113	3069152270	1.5k ohm
R114	3069472270	4.7k ohm
R201 ~ R205	3069103270	10k ohm
R206		Not used
R207	3069823270	82k ohm
R208	3069562270	5.6k ohm
R209	3069224270	220k ohm
R210	3069332270	3.3k ohm
R211	3069562270	5.6k ohm
R212	3069472270	4.7k ohm
R213,R214		Not used
R301 ~ R305	3069103270	10k ohm
R306		Not used
R307	3069823270	82k ohm
R308	3069562270	5.6k ohm
R309	3069224270	220k ohm
R310	3069332270	3.3k ohm
R311	3069562270	5.6k ohm
R312	3069472270	4.7k ohm
R313	3069152270	1.5k ohm
R314	3069472270	4.7k ohm
R401 ~ R405	3069103270	10k ohm
R406		Not used
R407	3069823270	82k ohm
R408	3069562270	5.6k ohm
R409	3069224270	220k ohm
R410	3069332270	3.3k ohm
R411	3069562270	5.6k ohm
R412	3069472270	4.7k ohm
R413,R414		Not used
R501	3069102270	1k ohm
R502 ~ R505	3069331270	330 ohm
R506,R507	3069122270	1.2k ohm

• Others

	4119102085	Wire Slat 2P, 80mm
	4119102145	Wire Slat 2P, 140mm
	4119111055	Wire Slat 11P, 50mm

Ref. No.	Part No.	Description	Position
	4438103410	RCA Jack 4P, AP4-0096	
	4618006810	Switch Slide, SSP042	
	4328202710	RCA Cord 4P	
	5508724215	Fuse Auto 30A/32V	
	6065101110	Cap Cord RCA	
	4462000210	Terminal Ass'y 4P-GA	
	4462000110	Terminal Ass'y 6P-GA	

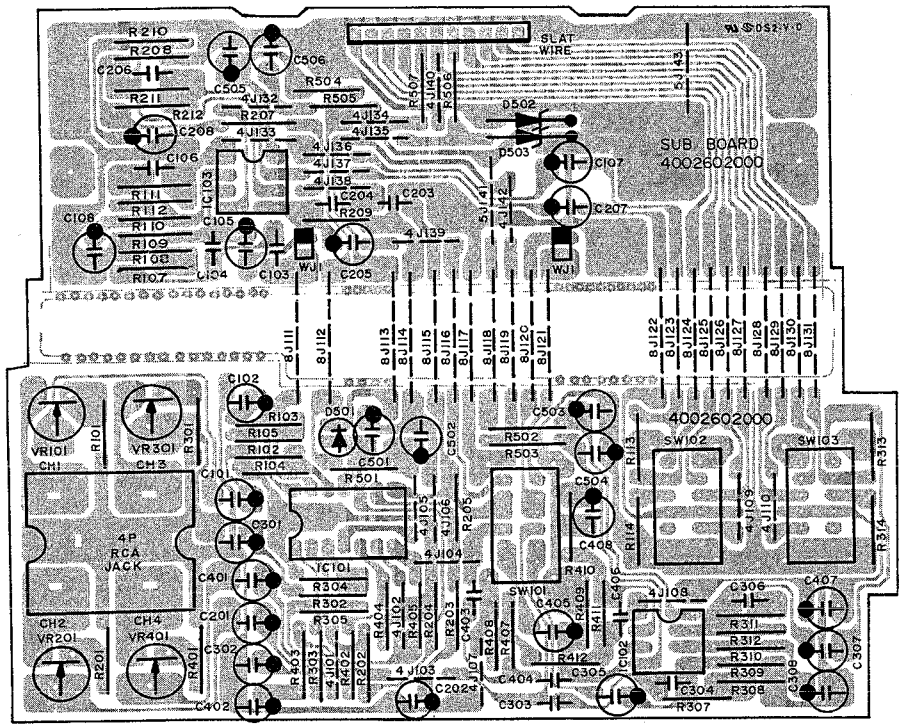
Note: RESISTOR/CAPACITOR TOLERANCE; D: ±0.5%, J: ±5%, K: ±10%, M: ±20%, Z: +80%, −20%
For * Marks C124,C125,C126,C127,C128,R139
C224,C225,C226,C227,C228,R239
C324,C325,C326,C327,C328,R339
C424,C425,C426,C427,C428,R439
is I.E (F.T.Z) Only Item.

Note;

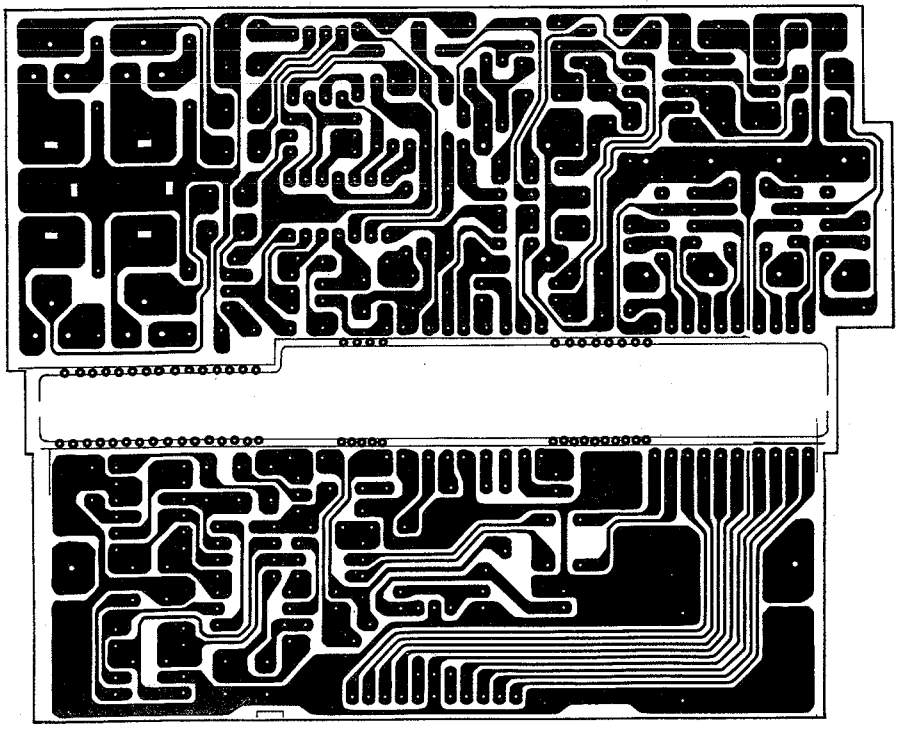
Top & Bottom View of P.C. Boards

FRONT P.C. BOARD 4002602000 (ALL MODEL)

— TOP VIEW —

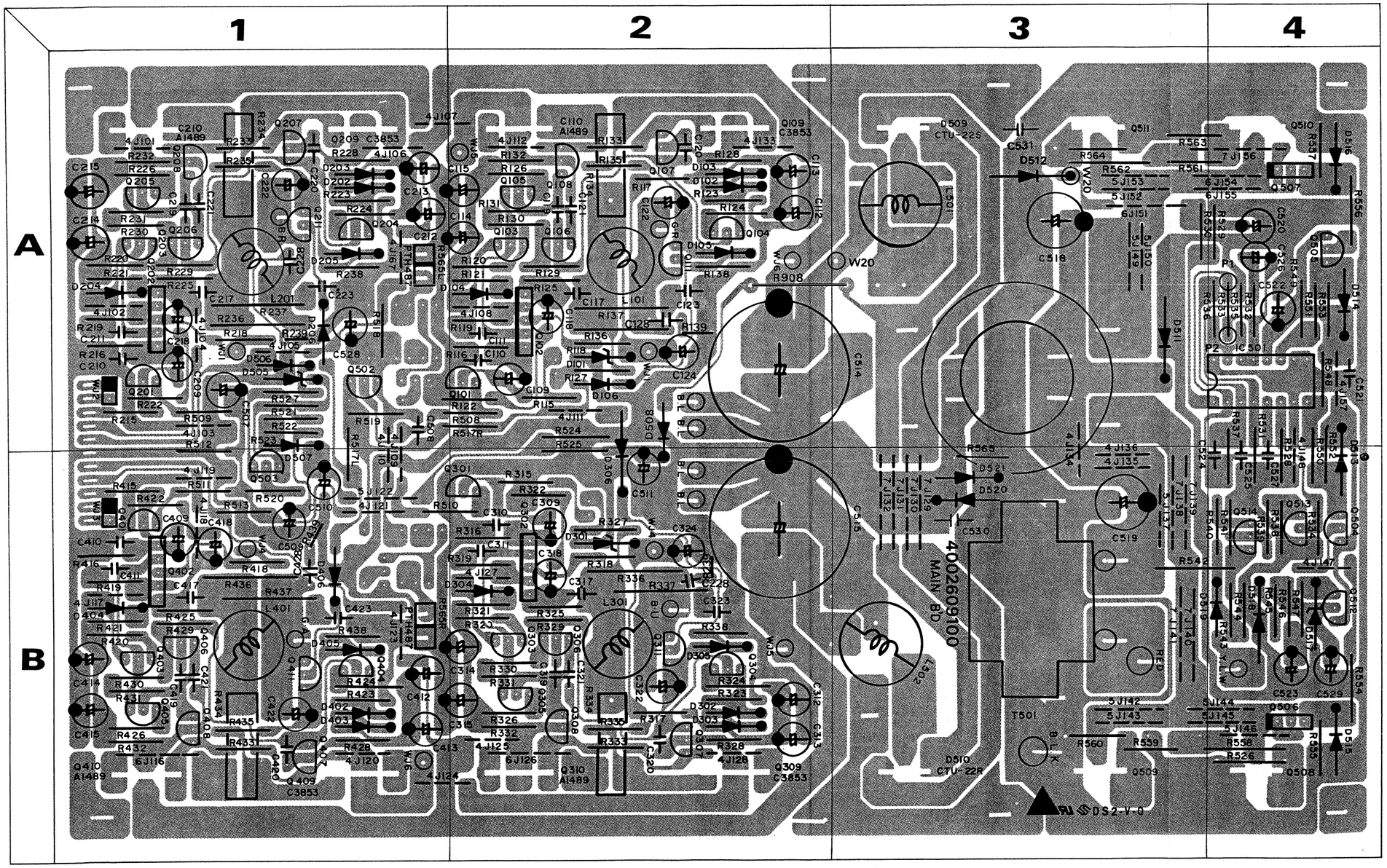


— BOTTOM VIEW —



MAIN P.C. BOARD 4002609100 (SCP-802BP/GA-1071BP)

– TOP VIEW –



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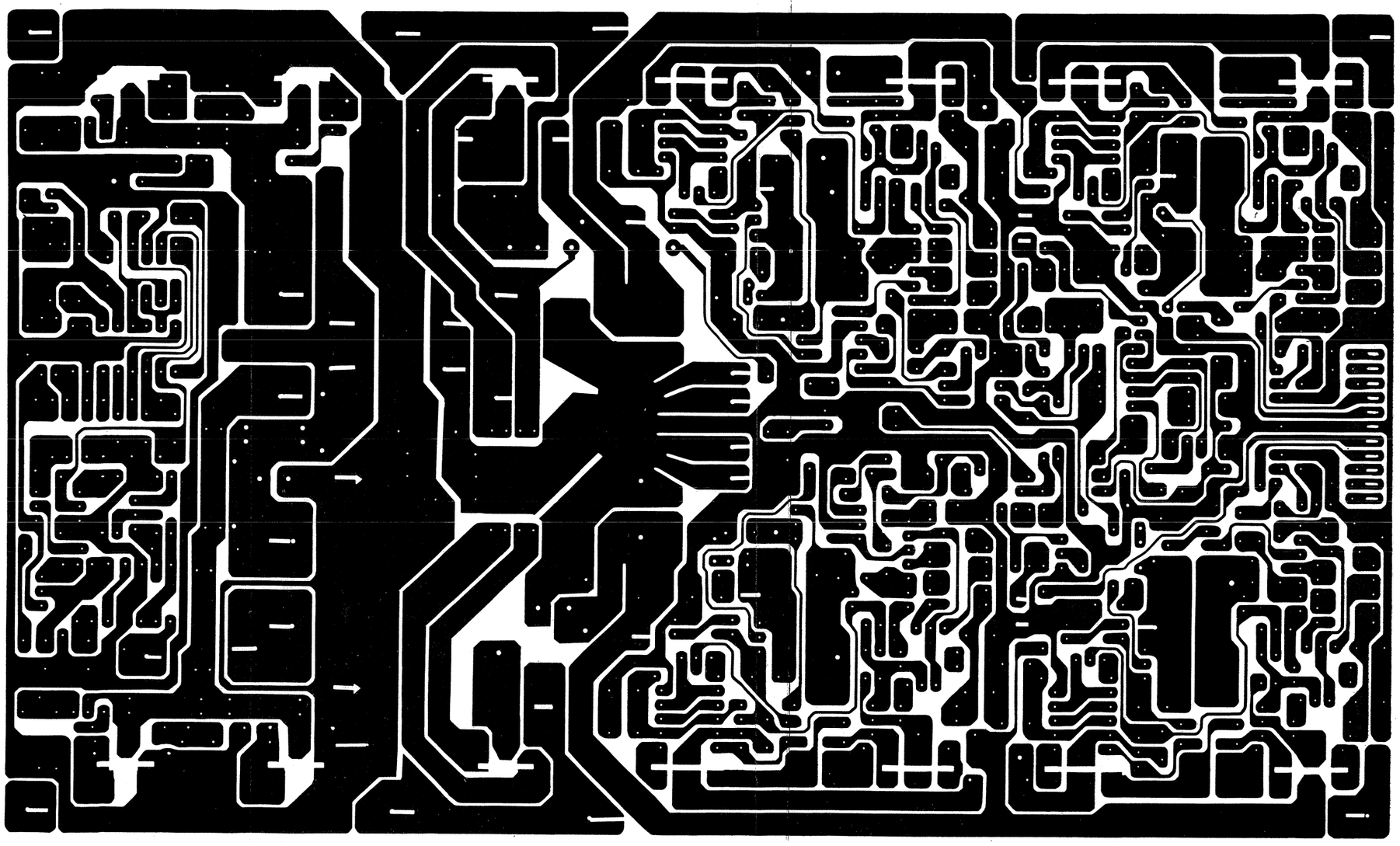
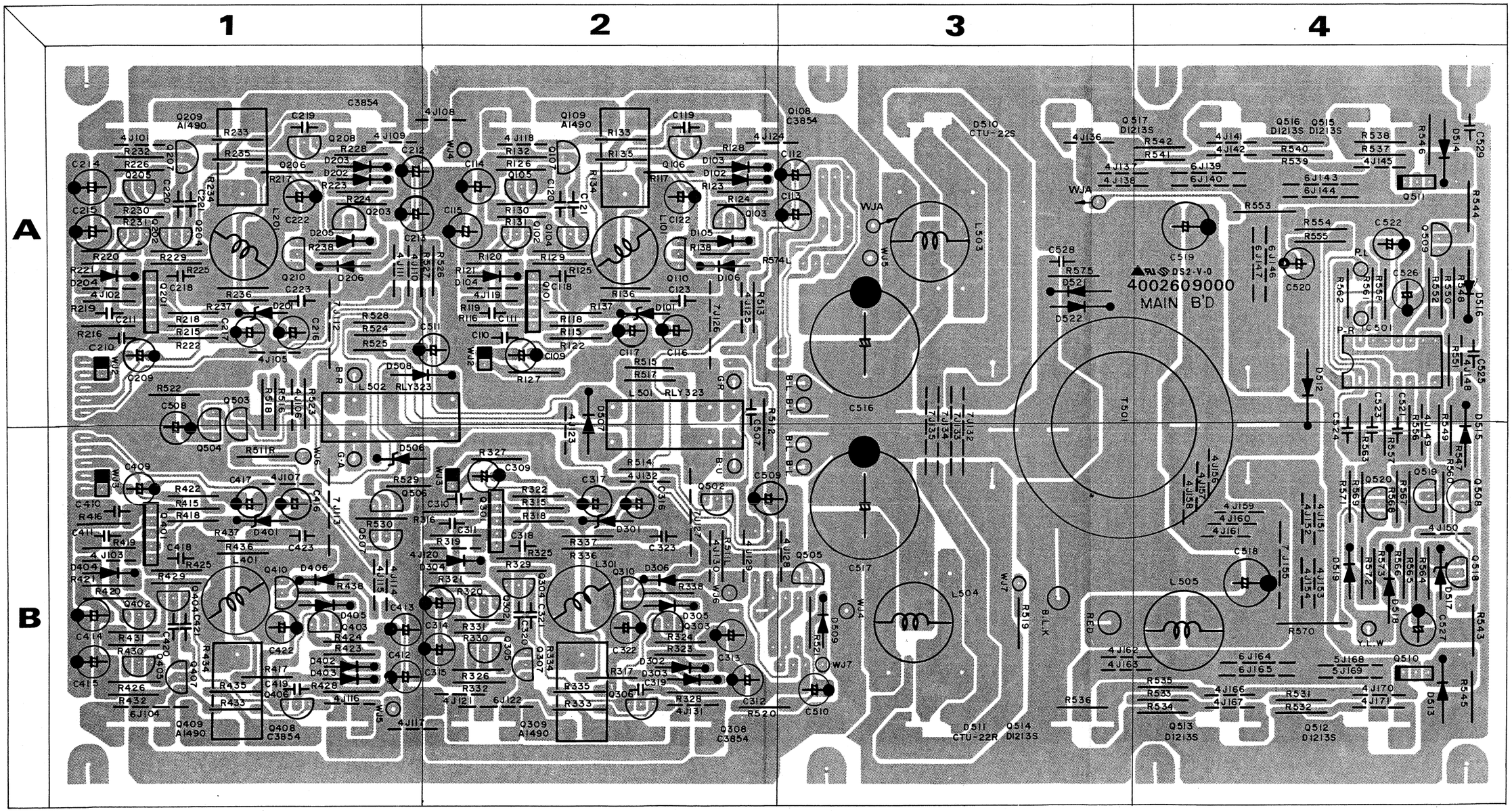


MAIN P.C. BOARD 4002609000 (SCP-1002BP/GA-1072BP)

– TOP VIEW –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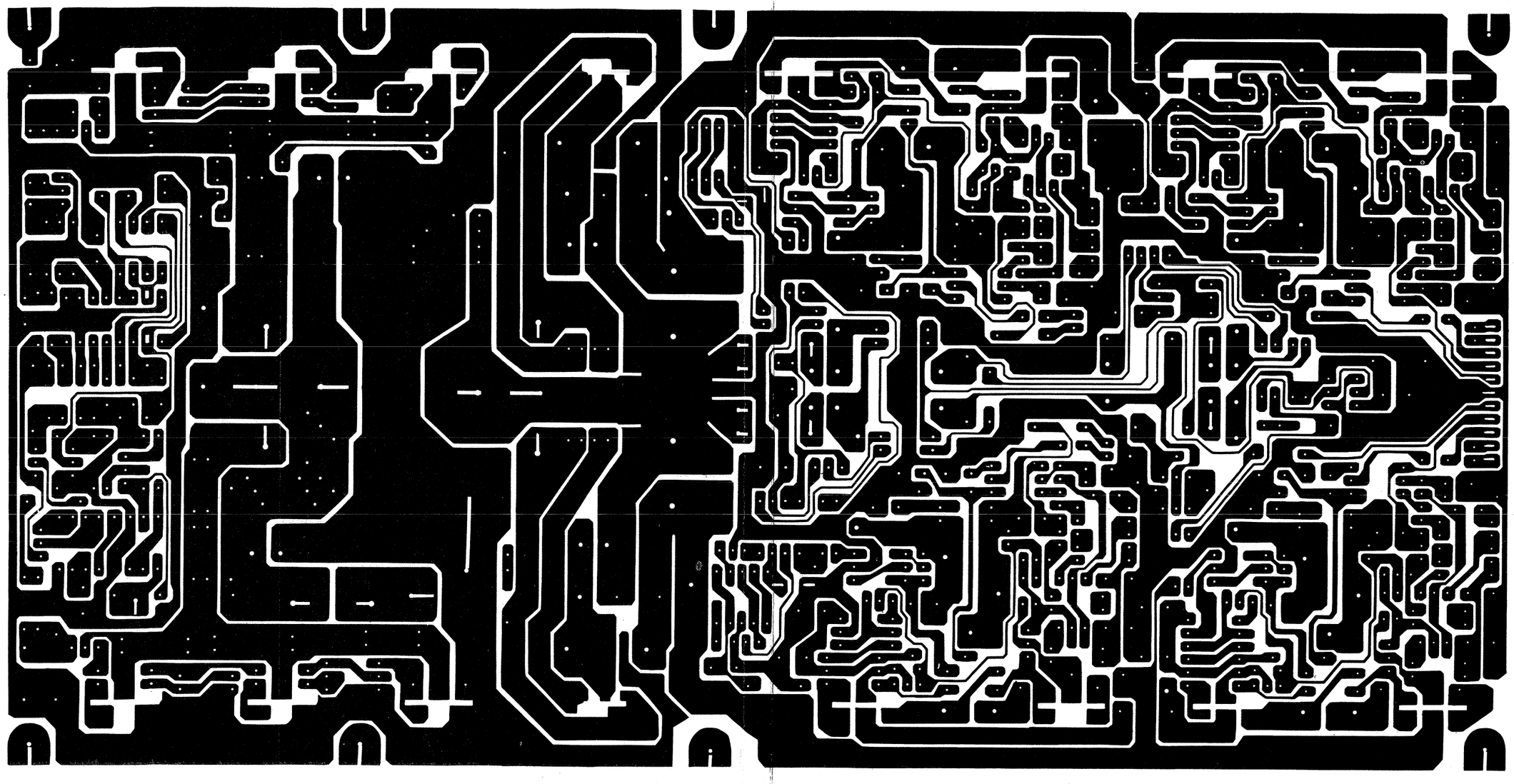
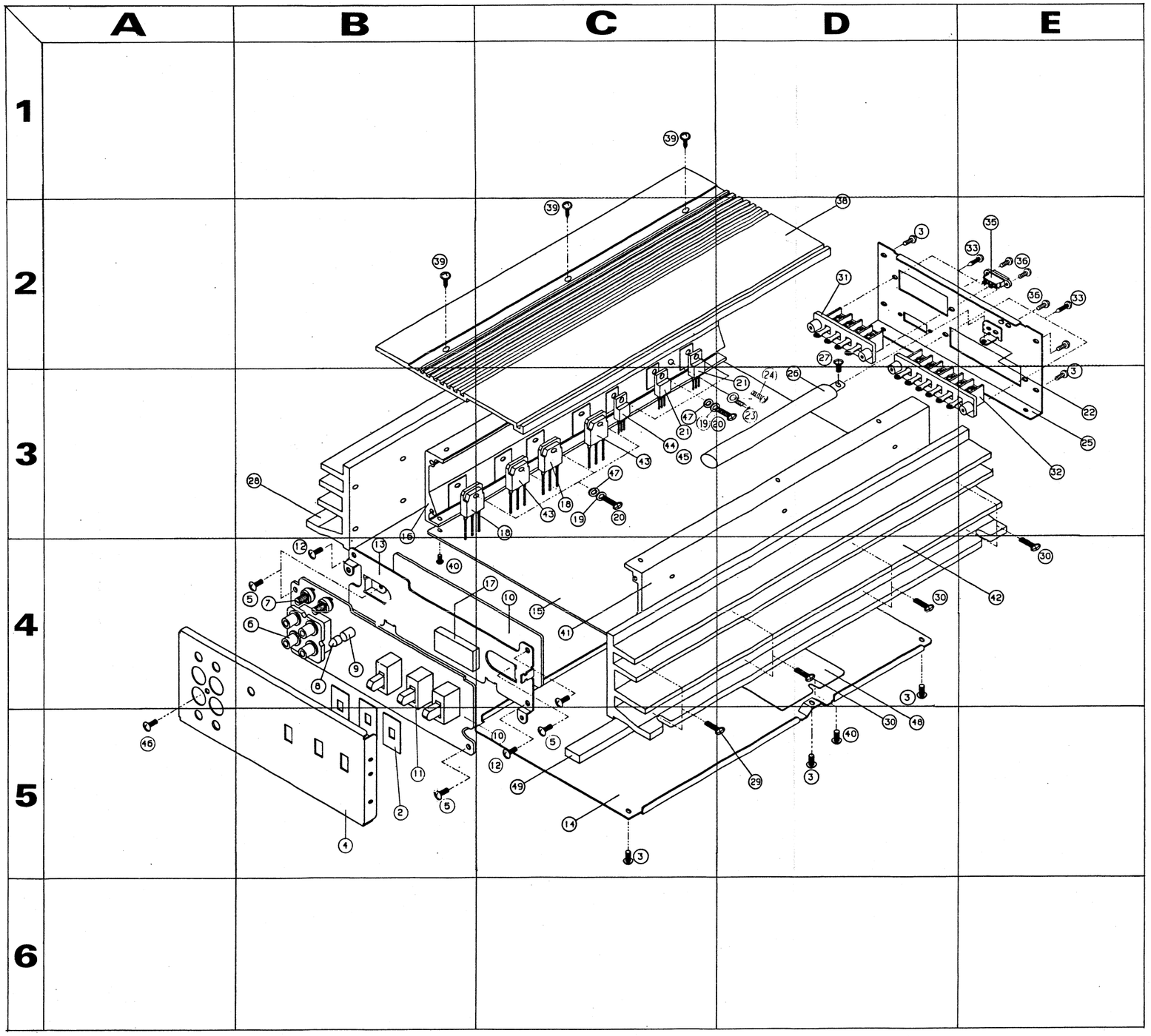
— BOTTOM VIEW —



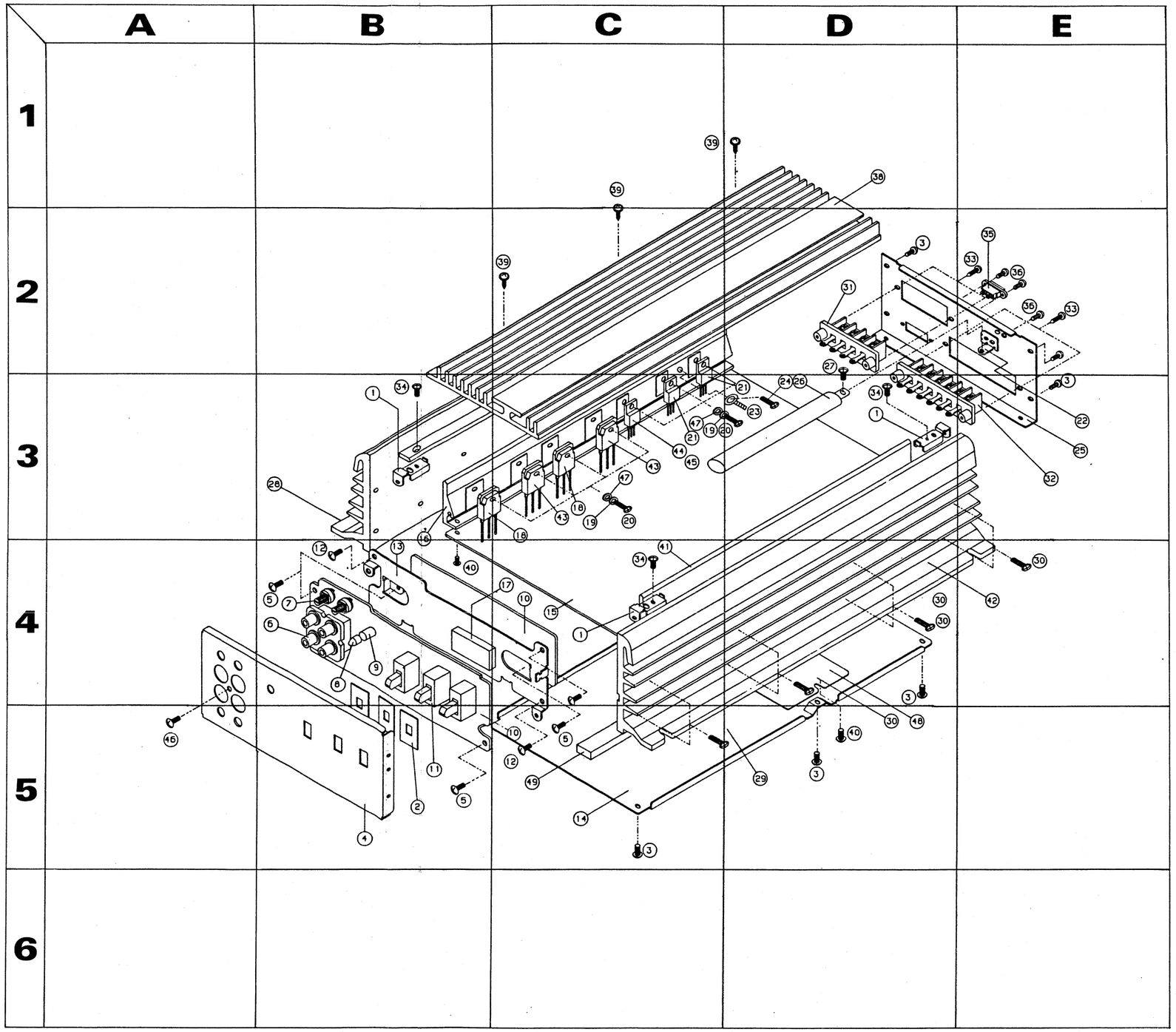
Exploded View Parts List of Cabinet & Chassis (SCP-802BP)

Ref. No.	Part No.	Description	Q'ty	Position
1		Not used		
2	6735008420	Cover Slide	3	5B
3	8119430063	Screw #2PTC 3×6B	10	5C,4D,5D
4	046123618652	Chassis Front	1	5B
5	8119430051	Screw SAM 3×5Y	5	4B,5B,5C
6	4438103410	Jack RCA 4P, AP4-0096	1	4B
7	3248322319	Resistor Semi, B-22K	4	4B
8	2308220109	LED, SLR 54URC3, Red	1	4B
9	6705007610	Spacing LED	1	4B
10	4002602000	Front P.C. Board	1	5C
11	4618006810	Switch Slide, SSP-042	3	5B
12	8109230061	Screw #2PTC 3×6Y	4	4B,5C
13	6023800610	Bracket Front PCB	1	4B
14	046122412011	Cover Bottom	1	5C
15	4002609100	Main P.C. Board	1	4C
16	7503008710	Heat Sink, IN – L	1	3B
17	6715014510	Rubber Cushion	1	4C
18	2028116405	TR PNP 2SA 1489	4	3C
19	8319130011	Washer Spring ϕ3Y	14	3C
20	8009130121	Screw BM 3×10Y	14	3C
21	2028417112	TR NPN 2SD 1212S	4	3C,3D
22	6505099810	Bracket Back	1	3E
23	2438012100	Posistor, PTH 487 A01	1	3D
24	8159230061	Screw #2WPTC 3×6Y	1	3D
25	046103002422	Chassis Back	1	3E
26	6165128110	Shield Fence	1	3D
27	8119430051	Screw SAM 3×5Y	1	2D
28	047503008511	Heat Sink, OUT – L	1	3B
29	8119430103	Screw SAM 3×10B	4	5D
30	8119930123	Screw 2PS 3×12B	12	4D,4E,5D
31	4462000210	Terminal Ass'Y 4P-GA	1	2D
32	4462000110	Terminal Ass'Y 6P-GA	1	3E
33	8119130083	Screw #1PT 3×8B	4	2E
34		Not used		
35	4454800520	Holder Fuse	1	2E
36	8119430063	Screw SAM 3×6B	3	2E
37		Not used		
38	047502001716	Heat Sink, Top	1	2D
39	8159930104	Screw #2WPS 3×10B	6	1C,2B,2C
40	8159230061	Screw #2WPTC 3×6Y	6	4B,5D
41	7503008610	Heat Sink, IN – R	1	4C
42	047503008411	Heat Sink, OUT – R	1	4E
43	2028416108	TR NPN 2SC 3853	4	3C
44	2058116103	Diode CTU-22S	1	3C
45	2058116104	Diode CTU-22R	1	3C
46	8119130083	Screw #1PT 3×8B	1	5A
47	8309030011	Washer Plain ϕ3Y	14	3C
48	4805000910	Plate Fiber	1	5D
49	6715015110	Rubber Shield	1	5C



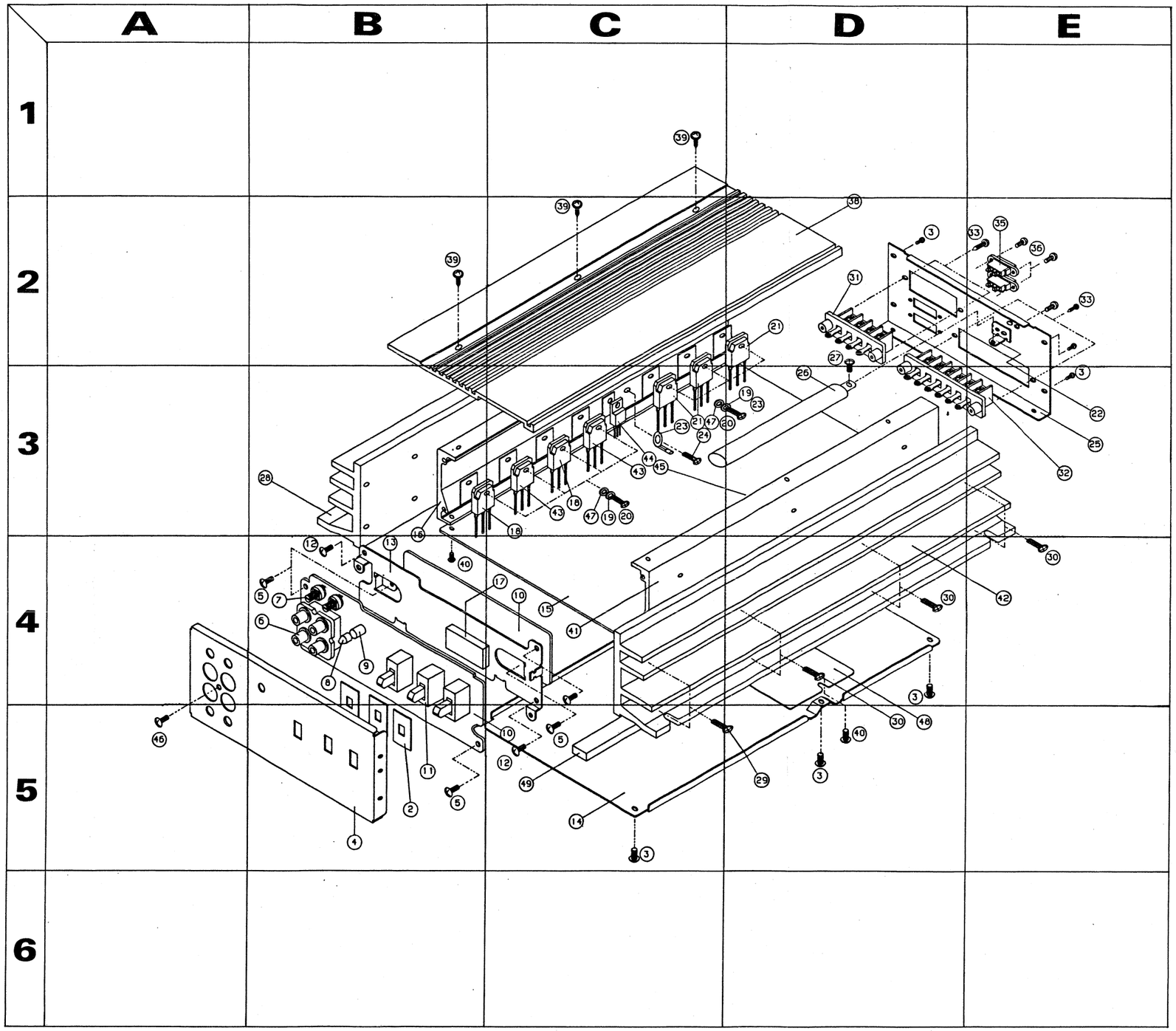
Exploded View Part List of Cabinet & Chassis (GA-1071BP)

Ref. No.	Part No.	Description	Q'ty	Position
1	6505099310	Bracket Chassis	4	3B,3D,4C
2	6735008420	Cover Slide	3	5B
3	8119230063	Screw #2PTC 3×6B	10	5C,4D,5D
4	046123618656	Chassis Front	1	5B
5	8119430051	Screw SAM 3×5Y	5	4B,5B,5C
6	4438103410	Jack RCA 4P, AP4-0096	1	4B
7	3248322319	Resistor Semi, B-22K	4	4B
8	2308220109	LED SLR 54URC3, Red	1	4B
9	6705007610	Spaceing LED	1	4B
10	4002602000	Front P.C. Board	1	5C
11	4618006810	Switch Slide, SSP 042	3	5B
12	8109230061	Screw #2BTC 3×6Y	4	4B,5C
13	6023800610	Bracket Front PCB	1	4B
14	6122412020	Cover Bottom	1	5C
15	4002609100	Main P.C. Board	1	4C
16	7503011910	Heat Sink IN-L	1	3B
17	6715014510	Rubber Cushion	1	4C
18	2028116405	TR PNP 2SA 1489	4	3C
19	8319130011	Wsher Spring ϕ3Y	14	3C
20	8009130123	Screw PM 3×12B	10	3C
21	2028417112	TR NPN 2SD 1212S	4	3C,3D
22	6505099810	Bracket Back	1	3E
23	2438012100	Posistor, PTH 487 A01	2	3D
24	8159230061	Screw #2WPTC 3×6Y	1	3D
25	046103002425	Chassis Back	1	3E
26	6165128110	Shield Fence	1	3D
27	8119430063	Screw SAM 3×5B	1	2D
28	047502003711	Heat Sink OUT-L	1	3B
29	8119430103	Screw SAM 3×10B	4	5D
30	8119930123	Screw 2PS 3×12B	12	2D,4E,5D
31	4462000210	Terminal Ass'y 4P-GA	1	2D
32	4462000110	Terminal Ass'y 6P-GA	1	3E
33	8119130083	Screw #1PT 3×8B	4	2E
34	8029130061	Screw FM 3×6Y	4	3B,3D,4C
35	4458400520	Holder Fuse	1	2E
36	8119430063	Screw SAM 3×6B	3	2E
37		Not used		
38	047502004111	Heat Sink Top	1	1D
39	8159930103	Screw #2WPS 3×10B	6	1C,2C
40	8159230061	Screw #2WPTC 3×6Y	6	4B,5D
41	7503012010	Heat Sink IN-R	1	4C
42	047502003811	Heat Sink OUT-R	1	4E
43	2028416108	TR NPN 2SC 3853	4	3C
44	2058116103	Diode CTU 22S	1	3C
45	2058116104	Diode CTU 22R	1	3C
46	8119130083	Screw #1PT 3×8B	1	5A
47	8309030011	Wsher Plate ϕ3Y	14	3C
48	4805000910	Plate Fiber	1	5B
49	6715015110	Rubber Shield	1	5C



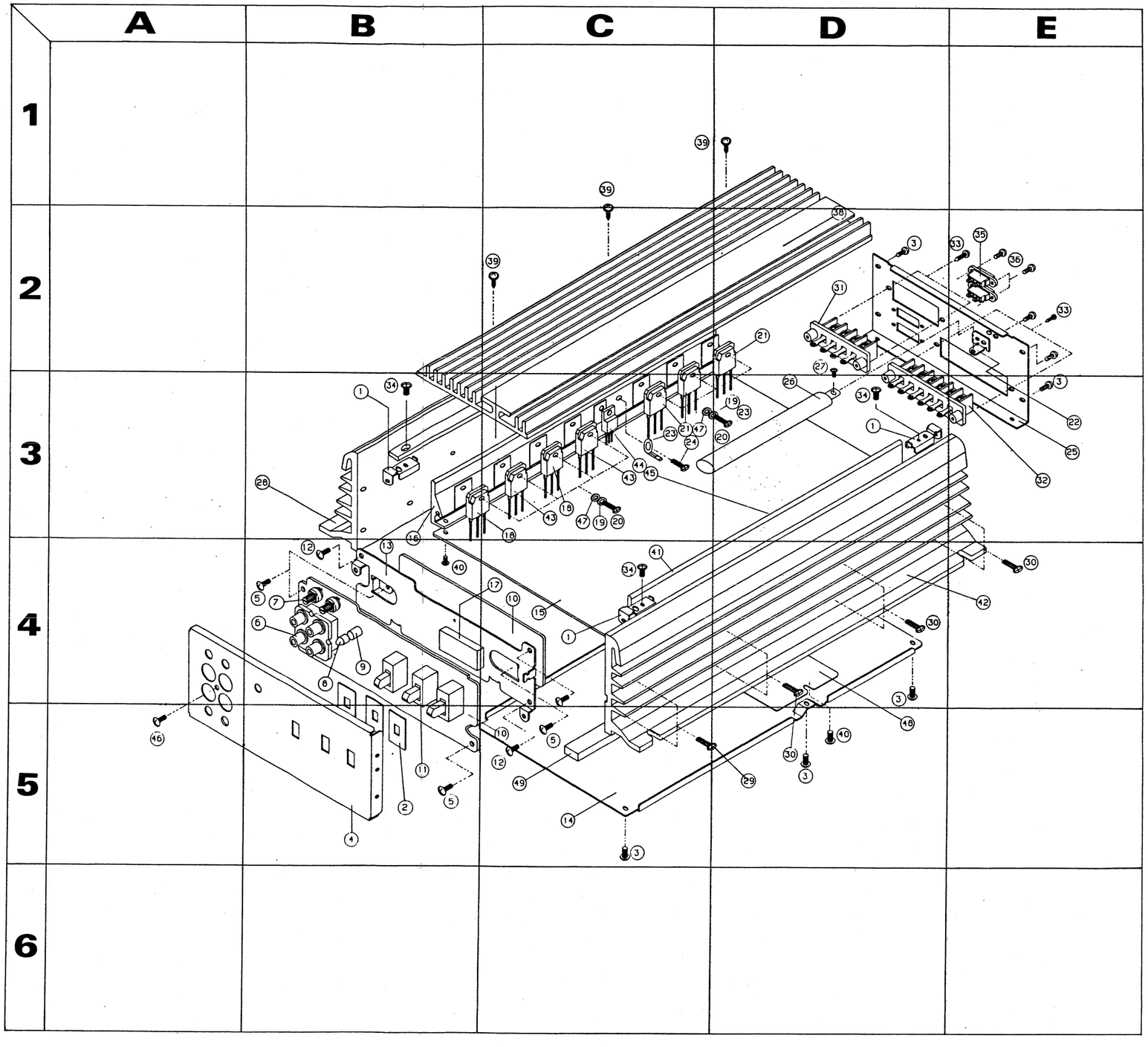
Exploded View Part List of Cabinet & Chassis (SCP-1002BP)

Ref. No.	Part No.	Description	Q'ty	Position
1		Not used		
2	6735008420	Cover Slide	3	5B
3	8119430063	Screw 2PTC 3×6B	10	5C,4D,5D
4	046123618652	Chassis Front	1	5B
5	8119430051	Screw SAM 3×5Y	5	4B,5B,5C
6	4438103410	Jack RCA 4P, AP4-0096	1	4B
7	3248322319	Resistor Semi, B-22K	4	4B
8	2308220109	LED, SLR 54URC3, Red	1	4B
9	6705007610	Spacing LED	1	4B
10	4002602000	Front P.C. Board	1	5C
11	4618006810	Switch Slide, SSP-042	3	5B
12	8109230061	Screw #2PTC 3×6Y	4	4B,5C
13	6023800610	Bracket Front PCB	1	4B
14	046122412711	Cover Bottom	1	5C
15	4002609000	Main P.C. Board	1	4C
16	7503009510	Heat Sink, IN – L	1	3B
17	6715014510	Rubber Cushion	1	4C
18	2028116104	TR PNP 2SA 1490	4	3C
19	8319130011	Washer Spring φ3Y	14	3C,3D
20	8009130121	Screw BM 3×10Y	14	3C
21	2028417113	TR NPN 2SD 1213S	4	3C,3D
22	6505099810	Bracket Back	1	3E
23	2438012100	Posistor, PTH 487 A01-BE222 TS	1	3D
24	8159230061	Screw #2WPTC 3×6Y	1	3D
25	046103002422	Chassis Back	1	3E
26	6165128110	Shield Fence	1	3D
27	8119430051	Screw SAM 3×5Y	1	2D
28	047502001911	Heat Sink, OUT – L	1	3B
29	8119430103	Screw SAM 3×10B	4	5D
30	8119930123	Screw 2PS 3×12B	12	4D,4E,5D
31	4462000210	Terminal Ass'Y 4P-GA	1	2D
32	4462000110	Terminal Ass'Y 6P-GA	1	3E
33	8119130083	Screw #1PT 3×8B	4	2E
34		Not used		
35	4454800520	Holder Fuse	1	2E
36	8119430063	Screw SAM 3×6B	3	2E
37		Not used		
38	047502002115	Heat Sink, Top	1	2D
39	8159930104	Screw #2WPS 3×10N	6	1C,2B,2C
40	8159230061	Screw #2WPTC 3×6Y	6	4B,5D
41	7503009410	Heat Sink, IN – R	1	4C
42	047502002011	Heat Sink, OUT – R	1	4E
43	2028416107	TR NPN 2SC 3854	4	3C
44	2058116103	Diode CTU-22S	1	3C
45	2058116104	Diode CTU-22R	1	3C
46	8119130083	Screw #1PT 3×8B	1	5A
47	8309030011	Washer Plain φ3Y	14	3C
48	4805000910	Plate Fiber	1	5D
49	6715015120	Rubber Shield	1	5C

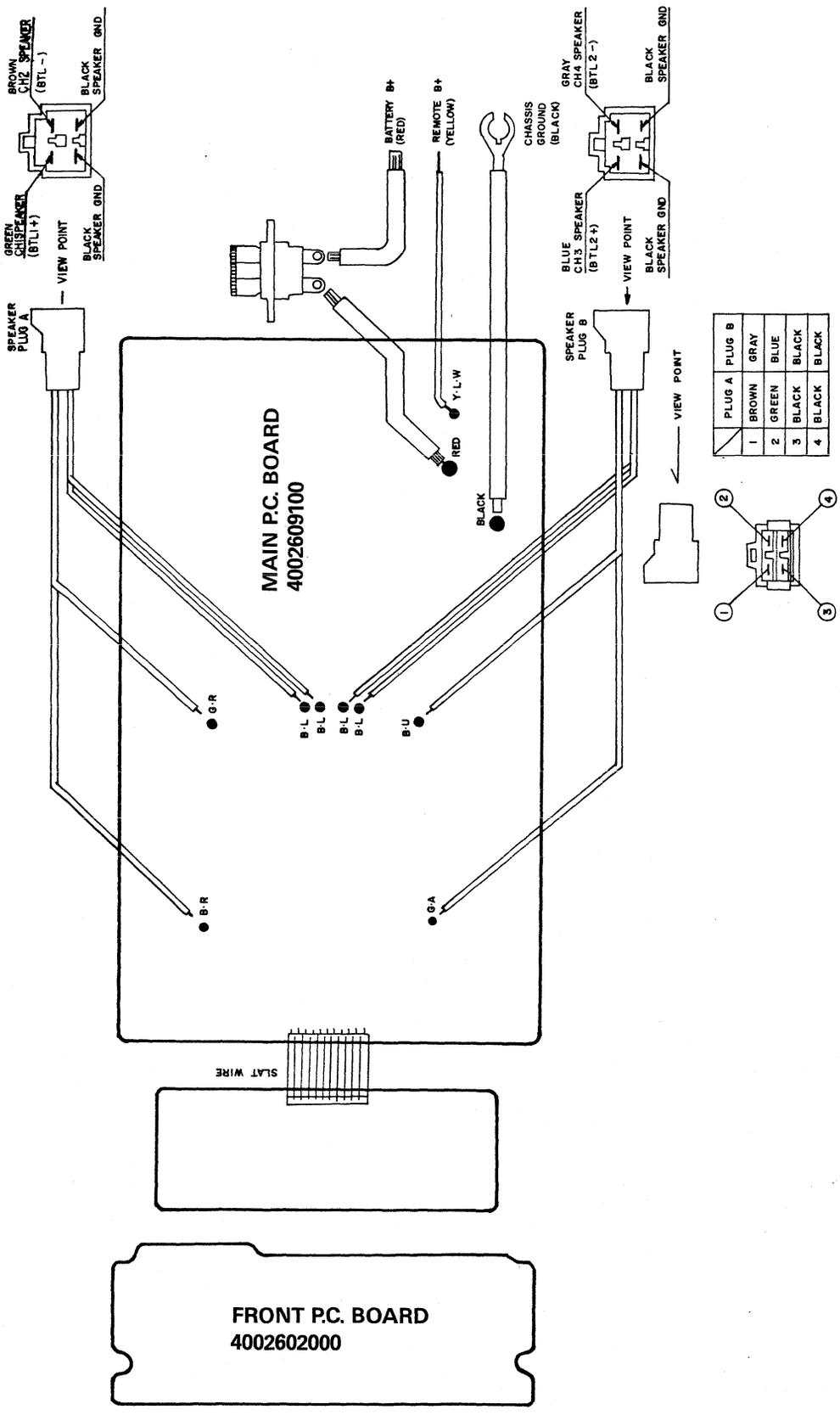


Exploded View Part List of Cabinet & Chassis (GA-1072BP)

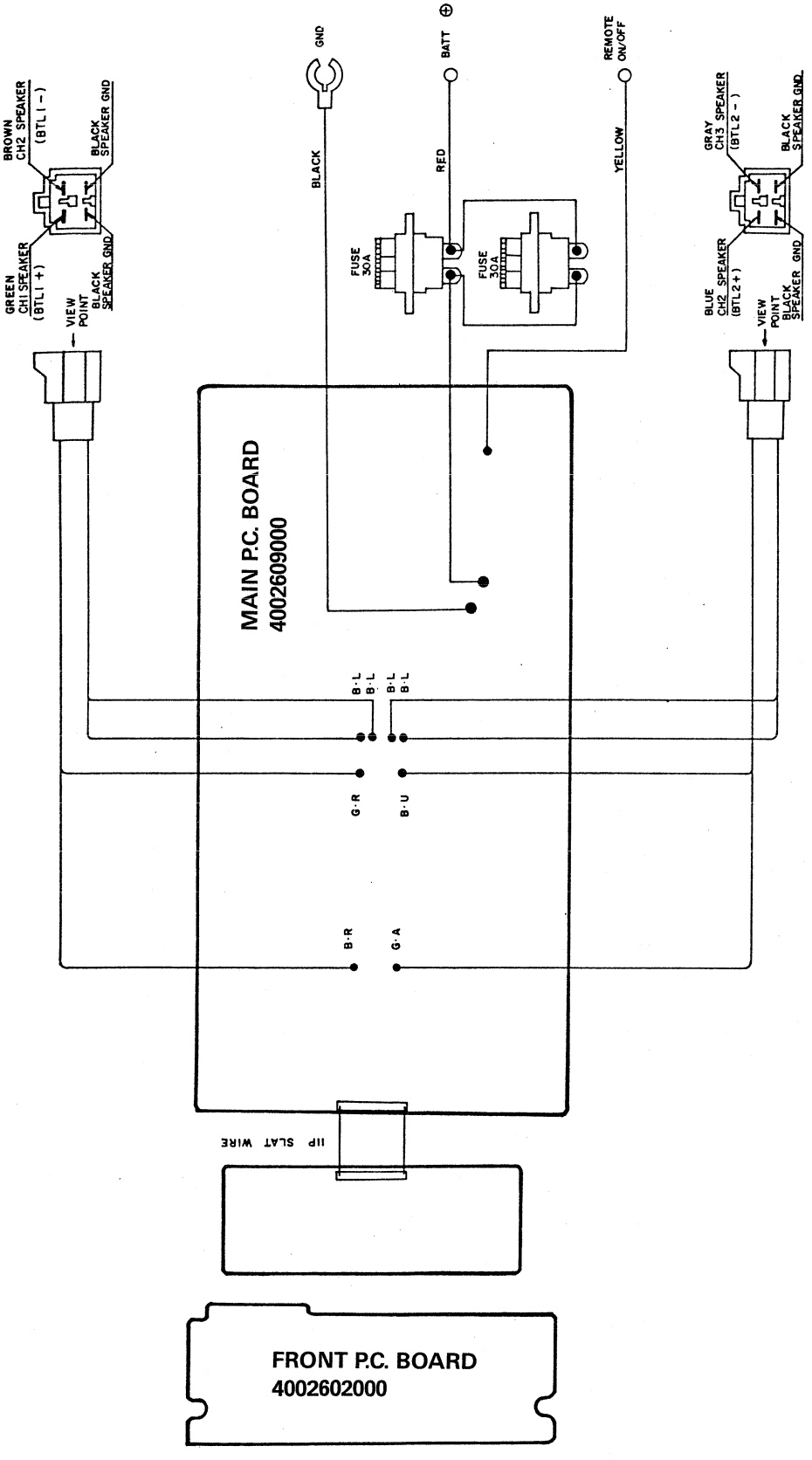
Ref. No.	Part No.	Description	Q'ty	Position
1	6505099310	Bracket Chassis	4	3B,3D,4C
2	6735008420	Cover Slide	3	5B
3	8119230063	Screw #2PTC 3×6B	10	5C,4D,5D
4	046123618656	Chassis Front	1	5B
5	8119430051	Screw SAM 3×5Y	5	4B,5B,5C
6	4438103410	Jack RCA 4P, AP4-0096	1	4B
7	3248322319	Resistor Semi, B-22K	4	4B
8	2308220109	LED SLR 54URC3, Red	1	4B
9	6705007610	Spaceing LED	1	4B
10	4002602000	Front P.C. Board	1	5C
11	4618006810	Switch Slide, SSP 042	3	5B
12	8109230061	Screw #2BTC 3×6Y	4	4B,5C
13	6023800610	Bracket, Front PCB	1	4B
14	6122412720	Cover Bottom	1	5C
15	4002609000	Main P.C. Board	1	4C
16	7503012110	Heat Sink IN-L	1	3B
17	6715014510	Rubber Cushion	1	4C
18	2028116104	TR PNP 2SA 1490	4	3C
19	8319130011	Washer Spring ϕ3Y	16	3C
20	8019130123	Screw PM 3×12B	8	3D
21	2028417113	TR NPN 2SD 1213S	6	3C,3D
22	6505099810	Bracket Back	1	3E
23	2438012100	Posistor, PTH 487 A01	2	3C
24	8159230061	Screw #2WPTC 3×6Y	1	3C
25	046103002414	Chassis Back	1	3E
26	6165128110	Shieldd Fence	1	3D
27	8119430051	Screw SAM 3×5Y	1	2D
28	047502004011	Heat Sink OUT-L	1	3B
29	8119430103	Screw SAM 3×10B	4	5D
30	8119930123	Screw 2PS 3×12B	12	4D,4E,5D
31	4462000210	Terminal Ass'Y 4P	1	2D
32	4462000110	Terminal Ass'Y 6P	1	3E
33	8119130083	Screw #1PT3×8B	4	2E
34	8019130061	Screw FM 3×6Y	4	3B,3D,4C
35	4458400520	Holder Fuse	2	2E
36	8119430063	Screw SAM 3×6B	5	2E
37		Not used		
38	047502004211	Heat Sink TOP	1	2D
39	8159930103	Screw #2WPS 3×10B	6	1C,2B,2C
40	8159230061	Screw #2WPTC 3×6Y	6	4B,5D
41	7503012210	Heat Sink IN-R	1	4C
42	047502003911	Heat Sink OUT-R	1	4E
43	2028416107	TR NPN 2SC 3854	4	3C
44	2058116103	Diode CTU 22S	1	3C
45	2058116104	Diode CTU 22R	1	3C
46	8119130083	Screw #1PT 3×8B	1	5A
47	8309030011	Washer Plate ϕ3Y	16	3C
48	4805000920	Plate Fiber	1	5D
49	4825000120	Rubber Shield	1	5C



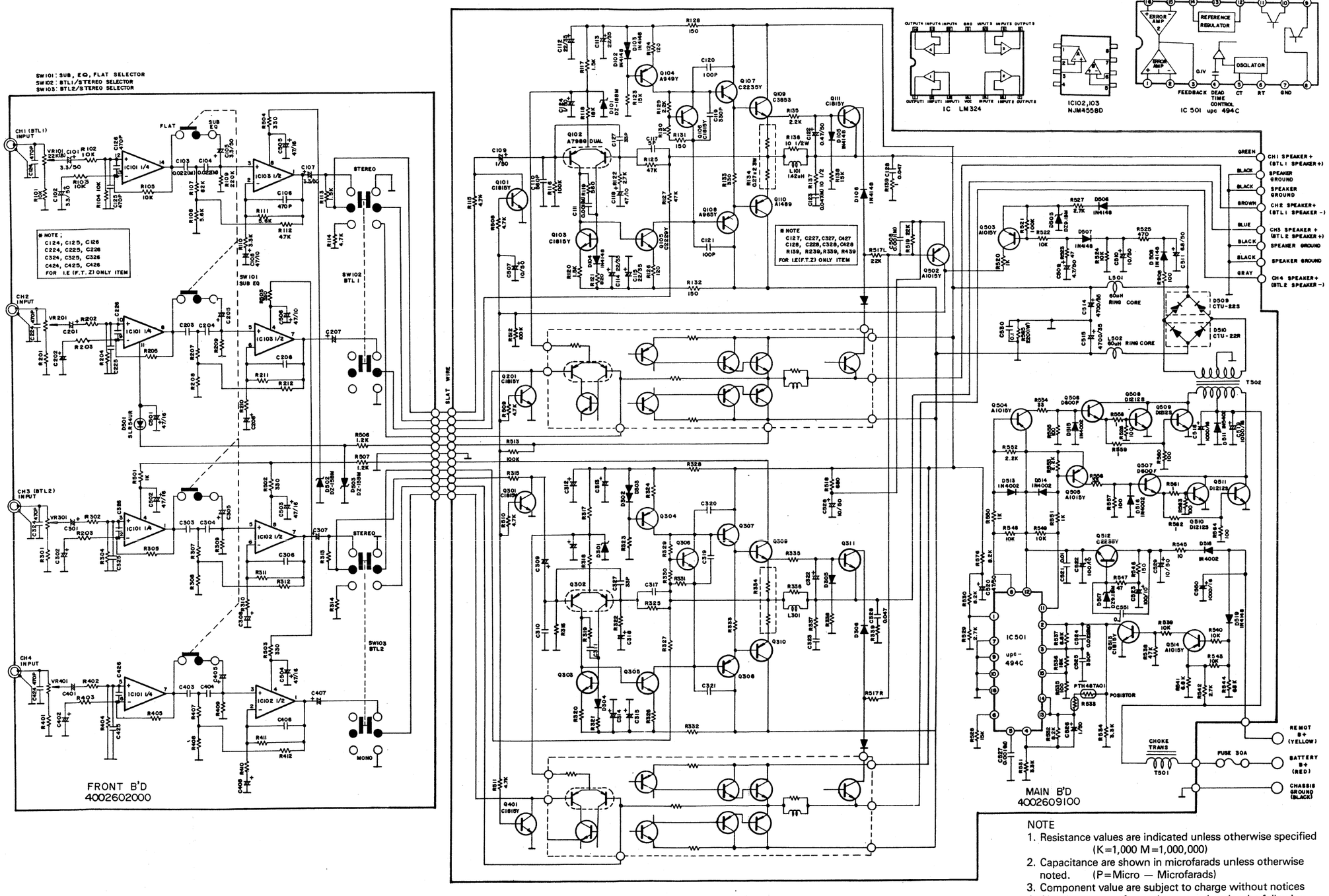
Point to Point Wiring Diagram (SCP-802BP/GA-1071BP)



Point to Point Wiring Diagram (SCP-1002BP/GA-1072BP)



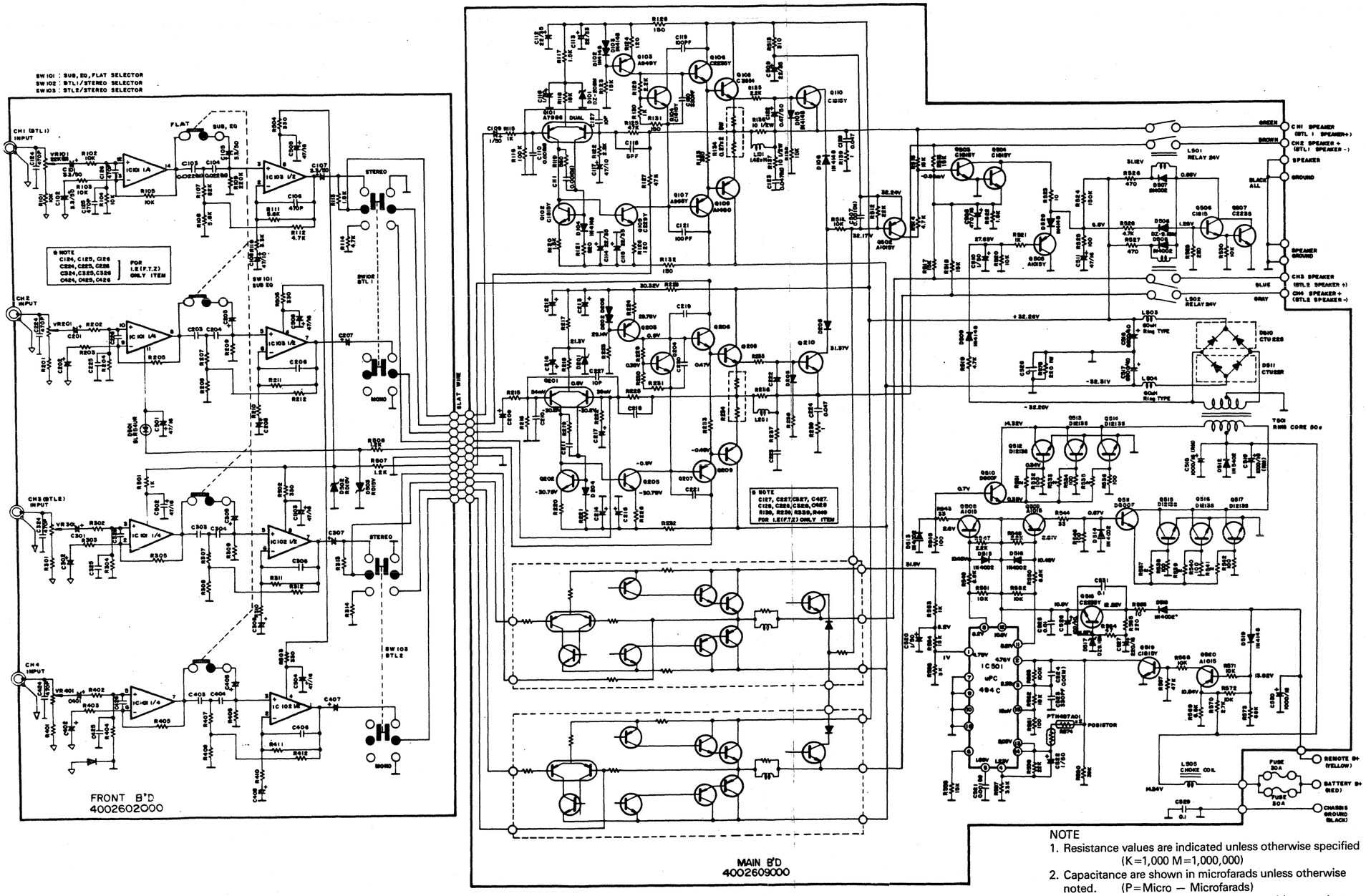
Schematic Diagram *(SCP-802BP/GA-1071BP)*

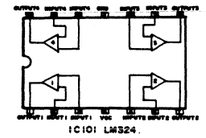


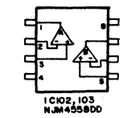
NOTE

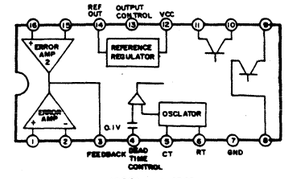
1. Resistance values are indicated unless otherwise specified (K=1,000 M=1,000,000)
2. Capacitance are shown in microfarads unless otherwise noted. (P=Micro — Microfarads)
3. Component value are subject to charge without notices
4. All voltages are refrenced to ground under the following conditions DC: NO Signal except where indicated.

Schematic Diagram (SCP-1002BP/GA-1072BP)









NOTE

1. Resistance values are indicated unless otherwise specified (K=1,000 M=1,000,000)
2. Capacitance are shown in microfarads unless otherwise noted. (P=Micro -- Microfarads)
3. Component value are subject to charge without notices
4. All voltages are refrenced to ground under the following conditions DC: NO Signal except where indicated.

IC & Transistor Voltage Chart

** SCP-802B/GA-1071BP ONLY ITEM

1. ICs

Pin No.	IC102, IC103 NJM4558DD	IC501 μPD494
1	0V	4.8V
2	4.1V	4.8V
3	4.0V	2.4V
4	14.8V	1.2V
5	3.6V	1.7V
6	3.8V	3.6V
7	0V	GND
8	3.2V	8.2V
9		GND
10		GND
11		8.2V
12		10.8V
13		5.0V
14		5.0V
15		15mV
16		GND

2. TRANSISTORs

	Q101	Q102	Q103	Q104	Q105	Q106
E	GND	0.6V	−22.6V	22.0V	−22.5V	−0.9V
C	−40mV	−22.0V	−22.0V	1.0V	−1.0V	1.1V
B	−9.4V	40mV	−21.0V	21.4V	−21.8V	−0.2V

	Q107	Q108	Q109	Q110	Q111	Q502
E	0.4V	−0.4V	−0.1mV	−0.3V	38mV	23.0V
C	23.6V	−23.9V	23.5V	−24.0V	23.1VV	−9.1V
B	1.0V	−1.0V	0.4V	−0.4V	50mV	23.5V

	Q503	Q504	Q505	Q506	Q507	Q508
E	9.0V	0.9V	8.7V	0.2V	0.2V	GND
C	−9.3V	5.0V	0.9V	14.4V	14.4V	14.4V
B	8.9V	GND	8.6V	0.4V	0.4V	0.2V

	Q512	Q509	Q510	Q511	Q513	Q514
E	8.7V	GND	GND	GND	GND	10.7V
C	13.0V	14.0V	14.0V	14.0V	4.7V	—
B	9.3V	0.2V	0.2V	0.3V	—	13.8V

** SCP-1002BP/GA-1072BP ONLY ITEM

1. ICs

Pin No.	IC102, IC103 NJM4558DD	IC501 μPD494
1	3.6mV	4.8V
2	3.6mV	4.8V
3	3.6mV	2.4V
4	14.8V	1.2V
5	3.3mV	1.7V
6	3.7mV	3.6V
7	3.5mV	GND
8	13.9mV	8.2V
9		GND
10		GND
11		8.2V
12		10.8V
13		5.0V
14		5.0V
15		15mV
16		GND

2. TRANSISTORs

	Q101	Q102	Q103	Q104	Q105	Q106
E	0.6V	−30.7V	29.7V	−0.9V	−30.7V	0.4V
C	−30.2V	−30.2V	0.9V	0.9V	−0.9V	32.2V
B	0.5V	−30.2V	29.1V	0.35V	−30.2V	0.9V

	Q107	Q108	Q109	Q110	Q503	Q504
E	−0.4V	0.3V	0.3V	0.3V	GND	−0.9V
C	−32.3V	32.2V	−32.3V	31.4V	5.0V	5.0V
B	−0.9V	0.4V	−0.4V	0.3V	−0.9V	GND

	Q505	Q506	Q507	Q508	Q509	Q510
E	6.8V	0.6V	GND	10.8V	10.8V	0.3V
C	GND	0.6V	0.6V	2.6V	2.6V	14.0V
B	27.0V	1.2V	0.6V	10.4V	10.4V	0.7V

	Q511	Q512	Q513	Q514	Q515	Q516
E	0.3V	GND	GND	GND	GND	GND
C	14.0V	14.0V	14.0V	14.0V	14.0V	14.0V
B	0.7V	0.3V	0.3V	0.3V	0.3V	0.3V

	Q517	Q518	Q519	Q520
E	GND	10.8V	GND	10.8V
C	14.0V	12.3V	4.8V	—
B	0.3V	11.4V	—	13.8V